

The study of the rainfall over the drainage area of Strawberry Creek is in no sense finished. The conclusions here presented must be regarded as provisional. One result, however, is clearly evident, and that is that the exposure of raingages, local as well as general, needs much careful study. The attempt to determine the amount of water falling on a drainage area is beset with difficulties, relating first to the relation between the catch of the raingage and the actual rainfall in its immediate vicinity, and second to the distribution of precipitation in different parts of a diversified watershed. Studies like that upon which this report is based should be continued not only for Strawberry Creek, but for other areas, small and large, until the relations between rainfall and rainfall measurements are better known. A word of caution is necessary: Although it is probable that many rainfall records are not accurate statements of the actual precipitation, they are the best available and should not be rejected out of hand. Such records may and should in time be supplemented by more accurate data, but as they stand they represent accumulated material of great value, which should not be rejected, except for good reason. The purpose of this report is to indicate how detailed work may increase the information already obtained, and to show the relations upon which detailed water supply studies may be based. The most important single result of the two years' work is probably the clear indication that, at least in wind-swept regions, some kind of shielding of the gage is highly desirable if accurate records are to be obtained.

5 51.21.1.5. (72) —————

DISTRIBUTION OF THUNDERSTORMS IN THE UNITED STATES.

By WILLIAM H. ALEXANDER, Local Forecaster.

[Dated: Weather Bureau, Cleveland, Ohio, July 28, 1915.]

INTRODUCTION.

The writer confesses to a peculiar admiration for the thunderstorm, being ever and always deeply impressed with the beauty and sublimity exhibited in its approach and passage. Led on by this natural impulse, direct and thoughtful attention has been given to these storms for quite a number of years and over a considerable area measured in degrees of latitude (17° to 44° N. lat.). Not only so, but all available literature bearing on them has been read with diligence. The primary purpose of this paper, however, is to present in a brief, simple way some data on the distribution of thunderstorms over the United States and the neighboring Canadian Provinces. The material has been collected by the approval of the Chief of Bureau and with the assistance extended by officials in charge of the various stations. There seems to be a real need for some more definite, detailed, and up-to-date statistics on the subject; perhaps the information will serve to supplement the paper on the thunderstorm by Prof. W. J. Humphreys.¹

As suggested by Prof. Humphreys in his paper, "the geographic distribution of the thunderstorm may safely be inferred from the fact that it is caused by strong vertical convection of humid air." This distribution over the United States and southern Canada is clearly shown on the accompanying charts (W. H. A.—1 to 13; XLIII—71 to 83). These charts also bring out the relative

frequency and distribution of these storms for the different months of the year; and when studied in conjunction with corresponding charts of temperature, humidity, and precipitation, they will suggest to the student of meteorology many interesting, intimate relations between these various factors.

The graphic charts are supplemented by detailed tabulated data for individual stations, having fairly long records, showing the number of storms for each month for the entire period covered by the record. It will be observed that in most cases there is a marked discrepancy between the number recorded in the early years of the record as compared with the number in recent years. This is probably due to the fact that the instructions governing the recording of thunderstorms were more definite and positive and the observers more careful during the latter part of the record.

METHODS OF THUNDERSTORM RECORDING USED BY THE UNITED STATES SIGNAL SERVICE AND THE WEATHER BUREAU.²

1871. The earliest edition of Instructions to Observer Sergeants on file in the Weather Bureau Library is that published in 1871. On page 19 of this work, in connection with instructions for entries in the "journal," is found the following:

In the journal will be entered daily all matters of interest not provided for in the various forms, such as meteoric and auroral displays, earthquakes, and unusual atmospheric appearances and disturbances, giving in all cases, when possible, the time of beginning and duration of each. Especially will the observer enter a detailed account of the characteristic phenomena of every serious storm that passes over his station.

No specific mention of thunderstorms is made either in the paragraph above quoted or elsewhere in these instructions. This paragraph appears to have remained practically unchanged in the Instructions to Observer Sergeants until 1879. (See below.)

1874. An early mention of the recording of thunderstorms by the Signal Service is found in connection with the explanation of Form E—Division of Telegrams and Reports for the Benefit of Commerce. (See Annual Report, Chief Signal Officer, 1874, p. 290), as follows:

Thunderstorms.—Time of occurrence and direction of motion * * *.

1879. In the instructions to Observer Sergeants, 1879, page 70, occurs the following reference to thunderstorms:

The abstract [of the journal] should show clearly and briefly all matters of interest not provided for in the regular forms, such as flight of birds, early vegetation * * * meteoric and auroral displays, earthquakes, thunderstorms, distant lightning, high winds and gales * * * giving whenever practicable the time of beginning and duration of each.

1881. Instructions to Observers of the Signal Service, U. S. A., Washington, 1881, page 91, contains practically the same instructions for recording thunderstorms as that quoted above from the edition of 1879. In addition, on page 63 of the 1881 edition, appears the following:

The state of the weather will be determined as follows:

* * * thunderstorm with light or heavy rain, when a thunderstorm is prevailing at the moment of the observation, or the rain is still falling, although neither thunder has been heard nor lightning observed for some time previous to the observation.

Signal Service Order No. 16, April 5, 1881, contains the following:

* * * Observers will record in their journals and, in a condensed form, under "Remarks," in Original Record and all other

¹ See this REVIEW, June, 1914, 43: 348-350.

² Contributed by the Weather Bureau Library, Prof. C. F. Talman in charge.

forms, the amount, character, and location of any special or peculiar appearance in the distant horizon, as low bank of clouds * * * thunderstorm, sheet or hear lightning in W., SW., E., etc.

1882. Instructions for Voluntary Observers of the Signal Service, 1882, pages 87-88, says:

Thunderstorms.—The time of beginning and ending of the storm must be indicated as exactly as possible; the point of the horizon whence it rises, the direction of the clouds, of the wind and its variations, and, if possible, the quantity of rain before and during the storm; of hail, etc., which falls; note if it passes over the place of observation, or at a distance; if it is accompanied, or not, with strong electrical detonations and numerous lightnings. It will be well to ascertain the state of the meteorological instruments every five minutes during the storm, especially of the barometer and the thermometer. [This is identical with a paragraph appearing in Directions for Meteorological Observations, published by the Smithsonian Institution, Washington, 1872, pp. 31-32.]

On page 103 of the above-mentioned Instructions for Voluntary Observers, in connection with instructions for filling up Form No. 122, appears the following:

Note observations of the following:

Thunderstorms: Time of occurrence and direction of motion. Distant thunder, without visible lightning * * *. Lightning at a distance: Time of occurrence, direction from observer, whether zigzag, forked, or diffused.

1884. During the summer of 1884 a special effort was made to collect thunderstorm data for that summer. In this connection was issued Signal Service Circular No. 4, March 1, 1884. The following extracts are taken from that circular:

It is desired that during the summer of 1884 a few simple facts be collected relating to the important subject of thunderstorms. To this end post offices and other centers have been selected, over a limited extent of country, at distances of about 10 miles * * *. Each thunderstorm should have some note made of it, in order that there may be no gap in any region. * * *

Note also, if on any day heat lightning is seen, the date, time of appearance, and direction.

* * * Please do not fail to make some note of every distinct thunderstorm that passes over, or within earshot of, the station.

Signal Service General Orders, No. 47, May 12, 1884, contains the following:

The following will be inserted in the Instructions to Observers, etc., after paragraph 130a:

130b. A storm from which distinct thunder is heard, though it may not pass over the station, and no rain may fall, will be considered a thunderstorm. Record thunderstorms in the journal, as far as possible, as follows:

Time of beginning and ending.

Direction from which the storm came and toward which it moved.

In this connection it may be of interest to note that in the introduction to the "Abstract of Journal" used by stations, which gives current instructions in condensed form, no specific mention is made of General Orders, No. 47, May 12, 1884 until 1894. Prior to that date the volumes of the "abstract" contained the following directions in regard to thunderstorms: "The following will be recorded in accordance with existing instructions * * * thunderstorms * * *." A reference also was given, as follows: "Read carefully the general instructions to observers, pages 69 to 73." (This presumably refers to the instructions of 1887, in which, apparently, the definition of "thunderstorm" given in Order No. 47, 1884, does not appear.) Beginning with the volume for 1894, the "Abstract of Journal" contains the following: "Whenever thunder is distinctly heard it will be recorded as a thunderstorm, whether or nor lightning is seen or rain falls at the station. See General Orders, No. 47, 1884."

It is very desirable to find out what thunderstorm instructions were given in the early numbers of Form 1001. These instructions appear not to be available in the bound

files of these forms at this office, as the covers, which it is thought contained the thunderstorm instructions, were removed before binding.

1887. General Instructions to Observers of the Signal Service, 1887, page 70, contains the following brief directions in regard to thunderstorms:

Thunderstorms, how recorded.—Record thunderstorms as follows:

Time of beginning and ending.

Direction from which the storm came and toward which it moved.

Temperature, and direction of wind, both before and after the storm.

Hail: Time of beginning and ending, and size of hailstones.

Signal Office, General Orders, No. 19, April 14, 1887, page 6, contains the following reference to thunderstorms in connection with entries in the "Abstract of Journal":

* * * To facilitate reference, marginal notes will be made in red ink at the left of the vertical line on each page upon the prominent subjects mentioned in the text, as "Aurora," "Rain," * * * "Thunderstorms" * * *.

1892. During the summer of 1892 another special effort was made (see 1884) to collect thunderstorm data, and for this purpose a circular, dated April 1, 1892, was issued by the Weather Bureau. (See Weather Bureau Bulletin No. 9: N. B. Conger, Report on the Forecasting of Thunderstorms, Washington, 1893, pp. 9-10.) This circular gives detailed instructions for recording thunderstorms, from which the following is quoted:

Thunder.—Record should be made whenever a thunderstorm can be seen or heard. Thunder without rainfall should be noted, and in such cases care should be taken to state that no rain fell.

1893. Executive Division Circular Letter No. 25, 1893, Instructions for Enciphering Beginning and Ending of Thunderstorms, was issued by the Weather Bureau May 15, 1893, apparently for the purpose of explaining the use of the Thunderstorm Cipher Code, "in transmitting, in regular reports, the time of beginning and ending of thunderstorms * * * during the months of June, July, and August." Quoting further from this circular:

The FIRST THUNDER heard will establish the time of BEGINNING; and the ENDING OF PRECIPITATION, the time of ENDING. * * *

A thunderstorm in the immediate vicinity of station will be reported, even though there is no precipitation at the station. The first thunder heard will determine the beginning, and the ending can be approximated.

1895. Instructions for Observers of the Weather Bureau, 1895, page 22, contains the following in regard to thunderstorms:

In recording thunderstorms, the following wording will be used: First thunder heard at ____; loudest at ____; last at ____; storm came from the ____ and moved toward the ____; temperature before the storm, ____; after, ____; direction of the wind before the storm, ____ after, ____; [etc.].

The following instructions (General Order No. 47, Signal Office), issued on May 12, 1884—

A storm from which distinct thunder is heard, though it may not pass over the station, and no rain may fall, will be considered a thunderstorm,

and the instructions issued January, 1894—

A day with thunderstorm is one on which thunder is distinctly heard at the station during the day, whether or not lightning is seen or rain falls at the station,

are essentially identical and have been in force ever since. They therefore governed during the period covered by the charts and most of the tabular matter. As stated, greater care has been exercised of late years in carrying out instructions, especially as to storms occurring at night, and therefore the later records are more reliable, certainly, than those of the earliest years of the service.

GENERAL DISTRIBUTION OF THUNDERSTORMS.

In regard to the more general distribution of the thunderstorms over the world, the following from Prof. Milham's Meteorology, page 326, may be of interest:

Thundershowers occur in nearly every part of the world, but the number decreases rapidly from the Equator toward the pole. Within the Tropics there are many places where there are nearly 200 days in the course of a year with thundershowers. The number of days with thundershowers decreases rapidly with latitude, until in the polar regions but one or two thundershowers in the course of several years may be recorded. Fewer thundershowers occur over the ocean than over the land, and mountainous regions have far more than level country.

Along this same line, Prof. Humphreys says (*op. cit.*, p. 352):

* * * From the nature of its formation one would assume, and the assumption is supported by observation, that the thunderstorm must be rare beyond either polar circle, especially over Greenland and over the Antarctic Continent, rare over great desert regions wherever situated, and, on the other hand, increasingly abundant with increase of temperature and humidity, and therefore in general most abundant in the more rainy portions of the equatorial regions.

In regard to the distribution of thunderstorms over the United States, Prof. A. J. Henry, in Bulletin Q, page 76, says:

That part of the United States in which thunderstorms occur most frequently lies east of the Rocky Mountains and south of about the forty-second parallel of latitude. * * * There are two regions of maximum annual frequency (50 days or over), the first in Florida and the East Gulf States, and the second in the lower Missouri Valley. The regions of least frequency (15 days or less) are along the New England coast, the northern portion of the Lake Region, the Plateau Region, and the Pacific coast.

The general belief that thunderstorms do not occur on the Pacific coast is not well founded. It is true that they are of infrequent occurrence along the immediate coast and in the lowlands, but they are quite frequent on the higher levels, both of the Coast Range and the Sierra Nevada. The region of maximum frequency west of the Rocky Mountains lies in Arizona, southern Utah, and southwestern Colorado, where thunderstorms occur, on the average of the year, on upward of 20 days. Except on the higher levels, many thunderstorms in the above-named States are rainless. In fact, it is not uncommon in the arid regions of the Southwest to witness a thunderstorm in progress, the rain from which evaporates in the extremely hot and dry air before it reaches the earth.

In this connection I reproduce some words by Mr. John Muir, because they introduce a sort of tragic side light on the more general theme of the thunderstorm. He is writing about the Big Trees—the Sequoia—of California, in the Atlantic Monthly for September, 1901. I take his words as quoted in Bulletin L, Climatology of California, pages 252–253.

Most of the Sierra trees die of disease. Thus the magnificent silver firs are devoured by fungi, and comparatively few of them live to see their hundredth birth year. But nothing hurts the Big Tree. I never saw one that was sick or showed the slightest sign of decay. It lives on through indefinite thousands of years, until burned, blown down, undermined, or shattered by some tremendous lightning stroke. No ordinary bolt ever seriously hurts Sequoia. In all my walks I have seen only one that was thus killed outright.

Lightning, though rare in California lowlands, is common on the Sierra. Almost every day in June and July small thunderstorms refresh the main forest belt. Clouds, like snowy mountains of marvelous beauty, grow rapidly in the calm sky about midday and cast cooling shadows and showers that seldom last more than an hour. Nevertheless, these brief, kind storms wound or kill a good many trees. I have seen silver fir 200 feet high split into long peeled rails and slivers down to the roots, leaving not even a stump, the rails radiating like the spokes of a wheel from a hole in the ground where the tree stood. But the Sequoia, instead of being split and slivered, usually has 40 or 50 feet of its brash, knotty top smashed off in short chunks about the size of cord wood, the beautiful rosy-red ruins covering the ground in a circle 100 feet wide or more.

I never saw any that had been cut down to the ground, or even to below the branches, except one in the Stanislaus Grove, about 12 feet in diameter, the greater part of which was smashed to fragments, leaving only a leafless stump about 75 feet high. It is a curious fact that all the very old Sequoia have lost their heads by lightning. "All things come to him who waits," but of all living things Sequoia is perhaps the only one able to wait long enough to make sure of being struck by lightning. Thousands of years it stands ready and waiting, offering its head to every passing cloud as if inviting its fate, praying for heaven's

fire as a blessing, and when at last the old head is off another of the same shape immediately begins to grow on.

But to return to our charts. I shall not enter into a detailed discussion of these, but merely point out some of the most obvious points of interest.

December.—The month of December has fewer thunderstorms than any other month, and I will begin with the December chart, No. 12 (XLIII–82). The first point we note is that the center of greatest activity during this month lies along the middle Gulf coast; north of a line drawn from southern Maine, diagonally across the country to southern California, practically no storms occur. Eastern Ohio, the central and northern portions of Virginia, most of Maryland and Delaware, also seem to be immune from thunderstorms in this month. South of this line the average is about one thunderstorm per month in the Gulf States, except along the east Texas and Louisiana coasts, where the average is about two per month. It is interesting, possibly surprising, to see over what a large portion of the country not a single thunderstorm was recorded during the 10 years under consideration.

January.—Passing to the January chart we note that the northern limit of thunderstorms lies considerably further north and that the center of activity has apparently moved a little inland, while the number of storms has increased quite generally over the lower Mississippi Valley. We note, however, that northern Virginia still seems to be immune while considerable activity is shown in northern Utah in the vicinity of Great Salt Lake.

February.—In February the northern limit is practically the same as in January, but there is a perceptible increase in the number of storms over the lower Mississippi Valley and eastward to the Atlantic coast. The center of greatest activity is still over the middle Gulf States but with a tendency to move northward. Thunderstorms continue relatively rare in the Appalachian Mountain districts north of North Carolina.

March.—The chart for the month of March reveals the fact that thunderstorms are very rare north and west of a line drawn from Lake Superior to El Paso, Tex., and that only very small areas are immune. Apparently the greater portion of Wyoming and possibly limited areas in the Far Northwest are nearly free from these phenomena. We notice, however, that there is now a marked increase in the number over all south-central and eastern districts. The center of greatest activity seems now to be over Tennessee and Kentucky, with a secondary center where the primary center was in February. A third center appears over the northern part of New Mexico.

April.—Passing to the April chart, we note a still further increase in storm frequency over the whole country, but especially over the Middle and Southern Plains States. A decided shift to the southwest has occurred in the center of greatest activity which now lies over southern Arkansas, northern Louisiana, and northeast Texas. The increase in the number of thunderstorms over the Rocky Mountain regions is very pronounced. These storms have now become fairly frequent over the southern portions of the Great Lakes. Apparently the only parts of the country now free from these phenomena are the middle California coast in the vicinity of San Francisco, and southern Arizona in the vicinity of Yuma. These storms now occur along the entire Canadian border.

May.—The chart for May shows us at once that the frequency of these storms is increasing throughout the country, especially in the Rocky Mountain States, and that the area of maximum frequency has spread northward from Texas to Iowa, including portions of Arkansas, Oklahoma, Kansas, Missouri, and Illinois. There is also another center of great frequency over Florida, if indeed

it has not become the center of greatest frequency. The entire California coast north of Los Angeles seems to be free from thunderstorms during the month of May, and this is the only part of the country that is thus immune.

June.—Passing from the May to the June chart, the surprising feature is the great increase in the number of thunderstorms throughout the field, except along the Pacific coast. The area of maximum frequency now overlies the southeast, more particularly Florida, with a decided secondary over eastern Wyoming and western Nebraska. Within these areas of "maximum frequency" storms occur on the average about every third day, and on the west coast of Florida about every other day. The California coast is still immune north of Los Angeles and thunderstorms are less frequent over southern and southwestern Texas.

July.—As the December chart holds the record for the least number of thunderstorms, July holds the record for the greatest number, taking the country as a whole. We note that the area of maximum frequency is still over the southeast with a very marked secondary over the southwest, including the State of Colorado and portions of the adjoining States. Thunderstorms are now more frequent along the Mexican border. San Francisco and vicinity are apparently exempt while the mountainous portions of the country seem to be especially favorable for the development of these storms, which, however, is true also of the other summer months.

August.—On the chart for August (W. H. A.—8) we notice for the first time signs of diminishing activity in the development of these storms. The region of greatest frequency remains over the southeast but is more restricted, while the secondary that was over Colorado in July has dropped south and touches the Mexican border. The average is still quite high over the southern half of the country, especially Florida, but practically no storms of this kind occur in California in this month.

September.—The September chart reveals a very marked decrease in the number of storms, except along the Pacific coast, where a slight increase is noticed. The chief center of activity is along the east Gulf coast with a moderate secondary over the southwest. No part of the country, except possibly San Francisco and vicinity, seems to be immune, but they are very rare in southern Canada and along the Canadian border west of the Great Lakes.

October.—The October chart also shows a rapid diminution in the number of thunderstorms over the country, and especially east of the Mississippi River. These storms are now relatively most frequent in Florida and the Plains States south of Iowa. There seems to be no decrease in the number along the Pacific coast.

November.—The November chart seems to indicate that the northern limit of thunderstorms has made considerable progress southward over the Rocky Mountain States and the regions west of the Great Plateau, and that these storms are relatively few in all sections, the region of greatest frequency being now over the middle Mississippi Valley, where the average is from one to two per month. The interior portions of the Atlantic States north of Georgia are practically immune from these storms during this month, and even Florida is nearly free. Except in the vicinity of the Great Lakes Canada is now free from these storms.

Annual frequency.—Having discussed the December chart, we pass to figure 13 (XLIII—83), which covers the entire period from 1904 to 1913, inclusive. The figures represent the total number of thunderstorms recorded during those 10 years at the several stations, and therefore to ascertain a fairly good working average for the year at any particular station simply divide the number by 10. Observe that no part of the field is entirely free from these

phenomena. We find two centers of great activity, one over Florida and the other over northern New Mexico. The first gathers about Tampa, Fla., with its 944 storms in 10 years, and the second about Santa Fe, N. Mex., with 710 to its credit. Tampa is a sea-level station, while Santa Fe is about 7,000 feet above the sea; the former is situated in what is perhaps the most humid portion of the United States, while the latter is in the arid regions. The contrast is very interesting and suggestive. The irregularity of the areas of thunderstorm frequency seems to suggest that local topography may enter as an important, possibly in some cases as a determining, factor in this problem. At any rate enough has been said, it is hoped, to demonstrate that the study of the thunderstorm is interesting from whatever angle one approaches it.

LOCAL CHARACTERS OF THUNDERSTORMS.

Some of the Weather Bureau officials were kind enough to send along with the tabular matter for the individual stations notes regarding the character of the thunderstorm in his particular locality, or of some historic storm. We offer a few of these as a part of this discussion.

Atlanta, Ga.—Thunderstorms at Atlanta are rarely of exceptional violence as regards the electrical display, but the outrushing winds are almost always very high, sometimes exceeding 60 miles per hour. For especially noteworthy thunderstorms at Atlanta, see MONTHLY WEATHER REVIEW, District No. 2, for October, 1910.—C. F. Von Hermann, Section Director.

Devils Lake, N. Dak.—Thunderstorms are rare in this district from November to March, inclusive. Old residents in this city, however, tell of a severe thunderstorm on January 1, in the early days, thus showing that it is possible for such a storm to develop.—M. R. Hovde, Observer.

[Mr. Hovde also points out the interesting fact that the year 1912, the wettest year (22.74 inches), had 34 thunderstorms, whereas 1913, the driest year (13.13 inches), had 40 thunderstorms.—W. H. A.]

Dubuque, Iowa.—A storm here in the valley moving northwestward is very unusual. Some of our storms are terrific, but as a rule they do little or no damage. I remember one a year or so ago which kept up all night (10 or 12 hours). One would think it impossible for one storm to cause so much "fireworks."—J. H. Spencer, Local Forecaster.

Grand Junction, Colo.—Severe thunderstorms are rare; the majority of the storms reported are light, in many cases one or a few peals only being heard. Excessive precipitation is practically unknown; the greatest amount recorded in one hour is 0.67 inch; the greatest in five minutes, 0.22 inch. Maximum wind velocity on record, 44 miles per hour.—E. S. Nichols, Local Forecaster.

Point Reyes Light, Cal.—The typical eastern thundercloud does not occur in this vicinity. Practically all of our few thunderstorms occur just after the passage of a low pressure area. Near the end of a storm and just before the wind shifts to the northwest, a special type of cumulo-nimbus often appears, and it is in connection with these clouds that our thunderstorms (often accompanied by hail) occur. Our thunderstorms are of short duration; often only a single peal of thunder.—James Jones, Assistant Observer.

Pueblo, Colo.—Thunderstorms unknown here in January and December.—L. H. Daingerfield, Local Forecaster.

[Pueblo is located on lat. 38° 18' N.; long. 104° 36' W.; elevation above sea level, 4,685 feet.—W. H. A.]

Rochester, N. Y.—Out of 742 thunderstorms recorded at this station, 27 were especially severe and more or less damaging from lightning. Ninety-five per cent of the storms were light or mild in character.—L. M. Dey, Local Forecaster.

Seattle, Wash.—With two or three exceptions the thunderstorms recorded at this station were light; nearly one-half of them were scarcely worthy of the name.—G. N. Salisbury, Section Director.

It is here appropriate to introduce the detailed tables of thunderstorm occurrences at those points in the United States which have served as the basis for the maps reproduced as charts W. H. A.—1 to 13 (XLIII—71 to 83). These figures have been contributed by the officials in charge of the respective stations. Mr. S. A. Potter of the Washington, D. C., station has computed the sums presented in the last two lines for each station. The sums in black-faced type are the values used in preparing the charts; beneath them are, in each case, the plain figures showing the total number of recorded thunderstorms since beginning of each record.

Number of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Abilene, Taylor County, Tex.													
[Lat., 32° 23' N.; long., 99° 40' W. Elevation, 1,738 feet.]													
1886-1903....	5	12	49	91	121	115	87	84	47	26	19	13	669
1904.....	1	0	0	4	8	5	3	7	4	1	1	0	34
1905.....	2	0	2	2	6	4	6	3	0	3	1	0	29
1906.....	0	0	0	0	8	5	5	2	7	1	0	0	28
1907.....	2	0	3	2	5	3	3	2	2	1	0	1	24
1908.....	0	0	1	6	6	3	11	3	2	3	3	0	38
1909.....	0	0	1	2	9	7	3	3	1	3	2	0	31
1910.....	0	2	2	4	6	8	5	8	5	2	0	1	43
1911.....	0	1	3	7	3	22	13	6	2	2	0	1	40
1912.....	0	1	2	7	6	2	4	7	3	4	0	1	37
1913.....	1	1	1	2	7	1	4	10	4	1	3	0	33
1904-13.....	6	5	15	36	64	40	57	51	30	21	10	4	339
1886-1913....	11	17	64	127	185	155	144	135	77	47	29	17	1,008
Amarillo, Potter Co., Tex.													
[Lat., 35° 13' N.; long., 101° 50' W. Elevation, 3,676 feet.]													
1892-1903....	2	1	3	33	78	96	96	102	55	27	6	0	499
1904.....	0	0	0	6	4	6	8	9	8	3	0	0	44
1905.....	0	0	4	8	9	6	9	8	1	1	0	0	40
1906.....	0	0	1	1	6	7	10	8	6	0	1	0	35
1907.....	1	1	0	2	8	5	5	8	3	2	0	0	34
1908.....	0	0	0	3	5	9	6	8	1	1	1	0	31
1909.....	0	0	1	1	7	14	2	3	1	1	1	0	25
1910.....	0	0	1	3	5	5	5	6	0	0	0	0	30
1911.....	0	0	1	3	5	4	9	8	3	1	0	0	36
1912.....	0	1	1	2	4	6	9	5	7	1	0	0	34
1913.....	0	0	1	3	7	3	5	8	4	1	1	1	1
1904-13.....	1	2	10	32	60	65	68	67	34	11	5	1	356
1892-1913....	3	3	13	65	138	161	164	169	89	38	11	1	855
Atlantic City, Atlantic County, N. J.													
[Lat., 39° 22' N.; long., 74° 25' W. Elevation, 52 feet.]													
1874-1903....	2	9	20	32	70	80	104	88	37	10	4	1	457
1904.....	0	0	0	2	3	4	5	4	1	0	0	0	19
1905.....	0	0	1	3	5	6	3	3	2	0	0	0	23
1906.....	0	0	2	0	2	7	7	8	4	5	0	0	35
1907.....	0	0	3	2	4	3	5	7	2	5	3	1	33
1908.....	0	0	1	3	3	3	7	7	2	1	0	0	22
1909.....	0	1	0	5	3	4	5	1	0	2	1	0	22
1910.....	0	2	0	3	4	6	4	1	0	0	0	0	25
1911.....	0	0	4	0	3	8	8	9	1	0	1	0	34
1912.....	0	2	2	5	3	4	9	3	3	2	0	0	33
1913.....	1	0	1	7	3	7	5	9	3	2	0	2	40
1904-1913....	1	5	14	30	33	51	60	50	22	15	3	2	286
1874-1913....	3	14	34	62	103	131	164	138	59	25	7	3	743
Atlanta, Fulton County, Ga.													
[Lat., 33° 45' N.; long., 84° 23' W. Elevation, 1,174 feet.]													
1884-1903....	11	22	50	57	102	149	173	148	23	15	17	6	773
1904.....	1	1	4	3	4	9	18	18	3	0	0	0	61
1905.....	1	0	5	7	13	13	16	14	5	1	1	0	76
1906.....	1	0	2	2	13	14	20	13	0	0	0	0	67
1907.....	0	0	3	6	9	8	16	14	5	0	2	2	65
1908.....	1	0	3	5	10	10	14	12	2	2	0	0	59
1909.....	0	6	6	4	7	14	9	11	5	2	2	0	66
1910.....	1	2	4	2	7	8	19	9	8	0	1	0	61
1911.....	0	1	1	4	8	5	15	10	9	1	0	0	55
1912.....	0	1	2	6	8	9	16	10	3	1	0	0	60
1913.....	1	2	5	1	6	15	16	10	3	1	0	0	60
1904-1913....	6	13	35	40	74	104	153	128	56	8	7	2	626
1884-1913....	17	35	85	97	176	253	326	276	79	23	24	8	1,399
Augusta, Richmond County, Ga.													
[Lat., 33° 28' N.; long., 81° 54' W. Elevation, 180 feet.]													
1875-1903....	7	20	47	64	128	187	199	164	50	11	8	11	896
1904.....	1	1	2	1	5	8	16	13	3	0	0	0	50
1905.....	0	0	9	4	5	8	8	8	0	1	0	0	46
1906.....	1	0	0	4	5	12	16	8	0	1	1	0	61
1907.....	0	1	2	4	9	8	17	12	9	0	1	0	63
1908.....	1	5	4	2	8	9	9	9	3	2	0	0	54
1909.....	1	3	2	2	4	11	13	6	5	1	0	0	55
1910.....	2	3	2	2	4	11	13	6	5	1	1	0	51
1911.....	0	0	1	1	3	12	16	5	5	0	1	0	53
1912.....	0	2	1	4	5	11	7	4	1	1	0	0	41
1913.....	1	2	5	2	6	11	13	12	4	0	1	1	58
1904-1913....	7	14	29	30	59	93	127	108	45	9	8	3	532
1875-1913....	14	34	76	94	187	280	326	272	95	20	16	14	1,428
Baker, Baker County, Oreg.													
[Lat., 44° 46' N.; long., 117° 50' W. Elevation, 3,471 feet.]													
1881-1903....	1	0	0	5	26	37	27	28	13	1	2	1	141
1904.....	0	0	0	1	2	1	8	4	2	1	0	0	19
1905.....	0	0	0	2	2	4	2	0	0	0	0	0	10
1906.....	0	0	0	0	3	5	4	4	0	0	0	0	16
1907.....	0	0	0	1	5	1	6	1	3	0	0	0	27
1908.....	0	0	0	2	1	4	5	4	5	0	0	0	22
1909.....	0	0	0	0	0	1	3	4	1	1	0	0	15
1910.....	0	0	0	0	0	0	0	0	0	0	0	0	19
1911.....	0	0	0	0	0	0	0	0	0	0	0	0	18
1912.....	0	0	0	0	0	0	0	0	0	0	0	0	25
1904-1913....	0	0	0	7	20	47	48	27	19	3	0	0	171
1881-1913....	1	0	0	12	46	84	75	55	32	4	2	1	312
Baltimore, Baltimore County, Md.													
[Lat., 39° 17' N.; long., 76° 37' W. Elevation, 123 feet.]													
1876-1903....	3	11	20	33	107	156	179	111	43	7	6	2	678
1904.....	0	1	1	2	6	8	7	3	3	0	0	0	31
1905.....	0	0	2	1	3	3	8	6	1	0	0	0	39
1906.....	0	2	1	3	2	4	9	6	1	0	0	0	33
1907.....	1	0	3	2	1	4	3	11	6	7	1	0	39
1908.....	1	0	3	1	6	1	13	3	2	0	0	0	31
1909.....	0	0	0	0	0	0	2	7	0	0	0	0	11
1910.....	0	1	1	2	5	6	3	2	0	0	0	0	23
1911.....	0	0	2	0	0	4	10	9	13	2	0	0	40
1912.....	0	1	3	7	6	4	9	4	6	1	0	0	41
1913.....	0	1	3	6	3	3	9	7	3	2	0	0	37
1904-1913....	2	6	19	29	45	54	85	51	27	6	1	0	225

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Block Island, Newport County, R. I.																											
[Lat., 41° 10' N.; long., 71° 36' W. Elevation, 26 feet.]																											
1889-1903...	2	3	6	5	19	27	34	27	21	5	2	2	163	1879-1903...	6	16	44	32	167	209	211	185	48	14	8	6	998
1904	0	0	0	2	3	4	3	6	2	0	0	0	20	1904	0	2	2	2	6	9	15	11	2	2	0	0	51
1905	0	0	0	4	3	1	7	5	2	0	1	0	23	1905	0	0	2	6	7	3	11	8	2	0	0	0	39
1906	0	0	0	1	2	3	2	3	1	1	1	0	18	1906	1	0	1	4	7	13	12	12	6	1	2	0	59
1907	0	0	3	4	4	3	2	1	4	0	1	0	22	1907	0	0	1	4	4	12	16	9	6	1	0	1	64
1908	0	0	4	0	0	4	1	1	0	0	1	0	14	1908	1	0	3	3	5	7	14	14	1	1	0	0	49
1909	0	0	0	3	6	2	5	1	1	0	0	0	18	1909	0	4	1	4	6	13	12	7	2	3	1	0	53
1910	0	1	2	1	3	2	4	2	0	3	0	0	18	1910	0	1	3	2	7	10	16	9	6	1	0	1	56
1911	0	1	1	0	0	4	4	5	1	1	1	0	18	1911	0	1	2	3	3	12	10	10	6	0	0	0	47
1912	0	1	2	1	3	2	5	1	2	1	1	0	19	1912	0	2	1	3	8	10	11	9	2	0	1	0	47
1913	1	2	2	4	0	2	3	5	2	2	0	0	23	1913	1	0	5	3	11	17	13	9	2	1	1	0	63
1904-1913...	1	5	14	20	24	27	39	30	19	8	6	0	193	1904-1913...	3	10	21	34	64	106	130	98	35	10	5	2	518
1889-1913...	3	8	20	25	43	54	73	67	40	13	8	2	356	1879-1913...	9	26	65	116	231	315	341	283	83	24	13	8	1,514
Boston, Suffolk County, Mass.																											
[Lat., 42° 21' N.; long., 81° 4' W. Elevation, 123 feet.]																											
1885-1903...	2	3	3	7	25	36	65	50	26	3	4	0	224	1879-1903...	12	43	79	120	193	254	292	239	79	32	20	6	1,389
1904	1	0	2	1	4	5	3	3	4	0	0	0	23	1904	1	1	11	3	9	14	16	18	3	1	0	1	78
1905	0	0	0	2	4	4	4	4	2	1	0	0	19	1905	0	3	6	8	13	11	10	6	0	1	0	0	57
1906	0	0	0	0	4	4	4	6	2	1	0	0	21	1906	1	0	3	3	3	13	13	20	18	0	1	0	75
1907	0	0	0	1	1	2	4	0	5	0	0	0	13	1907	2	0	5	8	12	12	13	6	0	4	0	0	86
1908	0	0	1	3	0	4	5	4	0	0	0	0	17	1908	2	1	3	7	10	18	13	5	0	2	0	0	46
1909	1	0	1	0	2	2	3	2	1	0	0	0	12	1909	1	5	7	9	7	17	10	12	5	2	2	1	87
1910	0	0	1	0	1	3	3	3	1	2	0	0	14	1910	1	4	4	11	15	20	10	12	0	3	1	18	
1911	0	0	1	0	2	4	3	4	1	0	1	0	16	1911	0	3	3	4	5	14	13	12	10	1	0	0	56
1912	0	1	0	1	6	6	6	6	1	0	1	0	23	1912	0	3	0	8	7	13	11	13	5	0	0	1	95
1913	0	0	2	1	2	1	6	6	2	1	0	1	22	1913	1	3	4	0	9	14	14	8	1	2	0	0	65
1904-1913...	2	1	8	8	24	30	41	40	18	4	2	1	180	1904-1913...	8	17	43	44	74	135	138	129	71	6	12	4	681
1885-1913...	4	4	11	15	49	66	106	90	44	7	6	1	404	1879-1913...	20	60	122	164	267	389	430	363	150	38	32	10	2,050
Buffalo, Erie County, N. Y.																											
[Lat., 42° 53' N.; long., 78° 53' W. Elevation, 767 feet.]																											
1874-1903...	4	3	20	40	86	120	152	114	60	34	10	4	647	1882-1903...	0	0	6	33	98	136	161	131	41	6	1	0	616
1904	0	2	3	1	3	9	8	6	2	3	1	0	38	1904	0	0	1	3	12	17	18	14	4	1	0	0	70
1905	0	0	1	0	5	7	11	5	2	1	0	0	32	1905	0	0	2	13	14	17	15	3	0	0	0	63	
1906	0	0	0	1	7	10	5	8	2	1	0	0	39	1906	0	0	0	3	7	7	16	11	9	1	0	0	54
1907	2	0	3	0	4	4	7	1	3	1	1	0	31	1907	0	0	0	7	10	17	15	6	0	0	0	55	
1908	0	1	3	1	6	4	8	6	3	1	0	0	24	1908	0	0	0	2	9	13	15	10	1	1	0	0	51
1909	0	0	0	3	6	2	7	3	2	1	0	0	21	1909	0	0	1	6	16	11	12	5	2	0	0	53	
1910	0	0	2	0	5	1	8	7	2	3	1	0	29	1910	0	0	0	1	7	11	13	9	8	0	0	49	
1911	0	0	2	1	6	5	7	9	2	0	0	0	32	1911	0	0	0	2	4	9	7	5	0	0	0	36	
1912	0	0	0	3	6	3	6	5	0	0	3	0	29	1912	0	0	0	1	10	15	10	6	1	0	0	44	
1913	0	0	2	5	2	8	5	5	0	1	0	0	28	1913	0	0	1	10	10	12	11	7	2	0	0	53	
1904-1913...	2	3	16	15	50	69	56	31	13	7	0	0	315	1904-1913...	0	0	2	25	75	119	140	112	49	6	0	0	528
1874-1913...	6	6	36	55	136	173	221	170	91	47	17	4	962	1882-1913...	0	0	8	58	173	253	301	246	90	12	1	0	1,141
Charleston, Charleston County, S. C.																											
[Lat., 32° 47' N.; long., 79° 56' W. Elevation, 48 feet.]																											
1871-1903...	21	35	58	91	180	323	379	340	117	46	29	20	1,639	1871-1903...	5	7	31	77	148	166	139	120	76	33	13	3	828
1904	4	1	8	7	13	25	18	6	0	1	2	0	92	1904	0	0	1	5	3	4	8	11	7	5	0	0	51
1905	1	1	2	6	15	5	17	12	8	0	0	2	68	1905	0	0	4	4	8	11	8	5	2	0	0	47	
1906	1	1	3	2	4	12	16	18	7	3	0	0	67	1906	2	2	0	3	3	7	4	7	4	0	0	32	
1907	0	3	2	6	6	12	15	19	9	1	0	1	74	1907	2	0	5	3	5	7	7	7	4	0	0	43	
1908	1	2	1	6	9	11	8	12	3	1	3	1	58	1908	0	1	5	3	7	7	8	5	3	0	2	0	

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Cincinnati, Hamilton County, Ohio.																											
[Lat., 39° 6' N.; long., 84° 30' W. Elevation, 628 feet.]																											
1884-1903....	5	17	33	49	113	138	105	113	47	17	10	2	649	1888-1903....	4	14	35	47	86	139	114	136	33	16	7	6	637
1904.....	0	1	6	1	7	10	6	3	2	2	0	1	39	1904.....	2	1	5	2	7	10	16	13	2	1	0	0	59
1905.....	0	0	1	4	11	8	8	10	4	0	0	0	48	1905.....	0	0	1	7	5	11	12	4	0	1	0	0	47
1906.....	1	1	0	3	6	9	10	10	7	0	0	0	47	1906.....	1	0	0	6	5	13	15	17	4	0	1	1	63
1907.....	1	0	2	4	5	8	11	4	5	1	1	0	41	1907.....	0	1	3	3	8	9	12	12	6	2	1	0	57
1908.....	0	1	4	2	7	6	10	3	1	0	0	0	34	1908.....	3	0	2	3	7	11	11	10	4	0	0	0	53
1909.....	1	2	0	7	4	10	6	10	1	3	2	0	46	1909.....	0	4	2	2	7	11	7	5	2	3	0	0	43
1910.....	0	0	2	3	4	12	2	9	2	2	0	0	39	1910.....	1	4	2	6	12	12	12	7	10	1	0	0	58
1911.....	3	0	3	4	8	11	11	3	8	5	2	0	58	1911.....	0	0	4	4	5	14	10	17	7	2	0	1	48
1912.....	0	0	1	7	8	12	13	10	5	0	0	0	56	1912.....	0	1	1	6	6	9	12	4	0	0	0	0	48
1913.....	0	0	5	2	6	9	12	8	3	1	1	0	47	1913.....	1	1	5	3	6	12	15	7	2	0	1	1	54
1904-1913....	6	5	24	36	66	87	100	63	45	15	8	1	456	1904-1913....	8	12	25	40	63	104	118	112	45	9	5	3	544
1884-1913....	11	22	57	85	179	225	205	176	92	32	18	3	1,105	1888-1913....	12	26	60	87	149	243	232	248	78	25	12	9	1,181
Cleveland, Cuyahoga County, Ohio.																											
[Lat., 41° 30' N.; long., 81° 42' W. Elevation, 762 feet.]																											
1884-1903....	4	8	23	32	113	133	141	94	58	21	6	1	634	1885-1903....	0	2	18	61	123	128	129	123	49	31	5	0	669
1904.....	0	3	4	2	5	3	14	4	4	0	0	0	39	1904.....	0	0	4	3	7	13	9	6	7	2	0	0	51
1905.....	0	0	0	3	10	3	8	6	4	4	0	0	38	1905.....	0	0	1	4	6	15	10	6	4	2	1	0	49
1906.....	1	0	0	4	7	9	8	12	4	1	0	0	46	1906.....	0	0	3	7	6	8	8	6	5	0	0	0	43
1907.....	1	0	3	1	4	10	9	1	5	2	0	0	36	1907.....	0	1	0	0	4	7	7	8	10	1	0	0	38
1908.....	0	0	3	4	8	8	7	3	1	0	0	0	42	1908.....	0	1	1	1	13	15	5	13	3	1	1	0	34
1909.....	1	0	0	5	7	10	4	8	4	0	0	0	40	1909.....	0	1	1	3	7	14	12	4	8	3	1	0	40
1910.....	0	0	2	1	4	3	6	3	2	3	1	0	26	1910.....	0	0	0	3	5	6	6	10	9	3	0	0	42
1911.....	0	0	1	1	5	4	7	5	2	2	0	0	32	1911.....	0	2	4	4	2	5	12	9	5	1	0	0	44
1912.....	0	1	0	3	5	5	12	7	5	2	1	0	41	1912.....	0	0	0	3	7	5	11	9	5	4	0	0	44
1913.....	1	0	2	4	3	8	10	7	2	5	0	0	41	1913.....	0	0	1	4	10	4	5	5	4	2	1	0	36
1904-1913....	4	4	15	28	60	64	83	61	42	20	3	0	384	1904-1913....	0	5	15	32	67	92	85	76	60	19	4	0	456
1884-1915....	8	12	38	60	173	197	224	153	104	41	9	1	1,018	1888-1913....	0	7	33	93	190	220	214	199	109	50	9	0	1,124
Columbus, Franklin County, Ohio.																											
[Lat., 39° 53' N.; long., 83° 00' W. Elevation, 774 feet.]																											
1879-1903....	5	12	35	67	139	173	141	111	54	20	15	2	779	1887-1903....	5	15	25	37	55	49	40	47	49	22	18	3	385
1904.....	0	1	5	1	6	8	11	7	4	3	0	1	47	1904.....	0	2	1	4	8	4	7	7	10	2	4	4	51
1905.....	0	0	1	6	8	10	7	5	3	0	1	0	41	1905.....	0	0	3	4	4	3	1	6	0	1	1	0	45
1906.....	1	0	0	4	7	8	13	12	3	1	0	0	49	1906.....	0	1	3	4	3	3	6	2	4	1	1	0	28
1907.....	0	0	4	3	4	11	9	2	4	0	0	0	37	1907.....	0	1	0	2	6	0	6	4	5	0	1	0	29
1908.....	0	1	7	2	7	6	11	4	1	0	0	0	39	1908.....	0	1	2	4	2	2	11	8	7	1	2	1	41
1909.....	1	2	0	4	7	10	10	8	3	0	3	0	44	1909.....	0	0	2	3	9	2	1	7	3	2	0	0	29
1910.....	1	0	2	4	4	8	8	5	11	2	3	0	48	1910.....	0	0	1	4	7	2	2	2	3	0	1	2	24
1911.....	2	1	2	4	4	8	7	9	8	3	0	0	53	1911.....	0	0	3	4	4	3	1	0	5	3	1	0	24
1912.....	0	0	1	6	9	7	14	13	3	0	0	0	53	1912.....	0	3	1	2	6	3	2	0	3	0	1	0	23
1913.....	2	0	5	1	5	8	12	14	6	2	0	0	45	1913.....	1	1	1	2	4	5	1	7	6	2	1	1	32
1904-1913....	7	5	27	35	65	83	100	68	46	10	9	1	456	1904-13....	1	9	17	33	53	30	40	38	52	11	10	10	304
1879-1913....	12	17	62	102	204	256	241	184	100	30	24	3	1,235	1887-1913....	6	24	42	70	108	79	80	85	101	33	28	13	669
Columbia, Boone County, Mo.																											
[Lat., 38° 57' N.; long., 92° 20' W. Elevation, 784 feet.]																											
1890-1903....	10	12	31	75	129	161	123	105	75	31	19	5	776	1880-1903....	4	7	33	72	146	171	162	116	89	35	18	5	858
1904.....	1	2	6	5	7	10	8	4	1	0	1	0	55	1904.....	0	0	5	1	3	6	9	8	11	2	0	0	45
1905.....	0	2	4	6	12	8	15	6	3	2	0	0	64	1905.....	2	0	3	5	6	7	7	7	5	1	0	0	45
1906.....	1	2	2	5	8	7	5	12	7	1	1	1	52	1906.....	0	1	3	2	3	11	7	7	5	1	0	0	48
1907.....	4	0	3	5	6	14	13	9	6	2	0	0	62	1907.....	1	0	3	2	4	9	9	11	6	2	0	0	47
1908.....	0	0	4	6	7	14	8	4	0	7	0	0	58	1908.....	0	1	3	4	9</								

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Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.		
Denver, Denver County, Colo.																													
[Lat., 39° 45' N.; long., 105° 0' W. Elevation, 5,272 feet.]																													
1884-1903....	0	1	4	24	101	104	185	174	42	5	0	0	0	700	1873-1903 ⁷ ...	3	7	35	65	147	177	181	123	94	44	9	3	888	
1904.....	0	0	0	1	13	14	16	9	5	0	0	0	0	58	1904.....	0	0	3	1	4	6	5	5	5	4	0	0	0	33
1905.....	0	0	3	1	12	11	16	9	5	0	0	0	0	57	1905.....	0	0	0	1	5	6	11	11	6	2	0	0	0	50
1906.....	0	0	1	0	7	8	9	12	5	0	0	0	0	42	1906.....	0	0	0	1	2	10	9	8	10	5	1	0	0	46
1907.....	0	0	0	1	7	9	12	6	4	1	0	0	0	40	1907.....	1	0	2	1	4	7	13	7	7	3	0	0	0	45
1908.....	0	0	0	2	4	10	9	13	2	0	0	0	0	40	1908.....	0	1	1	3	7	10	8	4	3	1	2	0	0	40
1909.....	0	0	1	0	8	13	16	10	4	0	0	0	0	52	1909.....	1	0	1	6	8	8	5	8	4	1	2	0	0	42
1910.....	0	0	0	0	2	5	9	10	12	1	0	0	0	39	1910.....	0	0	2	2	2	2	2	6	4	0	2	0	0	22
1911.....	0	0	0	2	6	5	7	4	0	0	0	0	0	31	1911.....	0	1	0	3	7	8	6	11	9	3	2	0	0	50
1912.....	0	0	0	1	11	16	16	2	1	0	0	0	0	48	1912.....	0	0	0	6	9	5	3	1	0	0	44	0	0	44
1913.....	0	0	0	4	7	11	12	14	10	2	0	0	0	60	1913.....	0	0	2	2	5	5	7	8	6	1	0	0	38	
1904-1913....	0	0	7	12	67	97	120	106	53	5	0	0	0	467	1904-1913....	2	2	16	31	59	72	74	76	54	20	10	0	0	416
1884-1913....	0	1	11	36	168	201	305	280	95	10	0	0	0	1,167	1873-1913....	5	9	51	96	206	249	255	199	148	64	19	3	1,304	
Des Moines, Polk County, Iowa.																													
[Lat., 41° 35' N.; long., 93° 37' W. Elevation, 861 feet.]																													
1879-1903....	5	2	37	95	164	196	183	147	91	58	13	5	996	1871-1903....	0	1	12	32	81	147	169	136	76	31	3	0	688		
1904.....	0	0	2	4	4	8	9	5	9	4	0	0	45	1904.....	0	0	0	0	2	5	5	5	2	0	0	0	19		
1905.....	0	0	2	1	9	14	6	11	5	3	0	0	51	1905.....	0	0	1	1	2	11	6	6	4	0	0	0	31		
1906.....	0	0	2	3	10	8	11	10	6	1	0	0	51	1906.....	0	0	0	1	7	8	6	6	2	0	0	0	30		
1907.....	2	0	1	1	5	8	18	9	7	4	0	0	55	1907.....	0	0	0	0	2	2	8	6	3	0	0	0	21		
1908.....	0	1	4	3	13	9	9	2	5	4	2	0	52	1908.....	0	0	0	0	5	9	7	3	0	0	0	0	30		
1909.....	0	0	3	9	7	13	8	4	5	4	2	0	55	1909.....	1	0	0	1	9	9	5	3	0	0	0	0	21		
1910.....	0	0	3	4	5	8	7	7	4	0	0	0	38	1910.....	0	0	1	0	3	5	11	6	2	1	0	0	29		
1911.....	0	0	2	0	7	7	4	7	10	4	1	0	50	1911.....	0	0	0	1	5	8	7	3	3	0	0	0	27		
1912.....	0	0	0	5	10	10	11	10	9	7	1	0	63	1912.....	0	0	0	2	9	4	7	5	1	0	0	0	32		
1913.....	0	0	2	5	12	8	4	9	5	4	0	0	49	1913.....	0	0	0	2	5	6	12	7	3	6	1	0	42		
1904-1913....	2	3	19	42	82	90	90	82	62	33	4	0	509	1904-1913....	1	0	2	8	40	60	78	51	33	8	1	0	282		
1879-1913....	7	5	56	137	246	286	273	229	153	91	17	5	1,505	1871-1913....	1	1	14	40	121	207	247	187	109	39	4	0	970		
Detroit, Wayne County, Mich.																													
[Lat., 42° 19' 54" N.; long., 83° 02' 51" W. Elevation, 730 feet.]																													
1871-1903....	3	6	28	55	151	179	185	126	73	36	5	1	813	1884-1903....	2	3	3	9	18	57	122	107	52	19	3	0	395		
1904.....	0	3	3	0	3	6	8	4	8	1	0	0	36	1904.....	0	0	0	0	1	7	5	8	4	6	0	0	31		
1905.....	0	0	1	1	7	7	9	4	2	0	1	0	32	1905.....	0	1	0	1	2	7	7	12	2	0	1	0	33		
1906.....	0	2	0	4	3	7	10	9	1	2	1	0	39	1906.....	1	1	0	2	2	0	14	10	5	1	1	0	37		
1907.....	2	0	2	3	2	9	5	1	2	0	0	0	30	1907.....	0	0	0	1	2	2	6	13	6	4	1	0	35		
1908.....	0	0	4	6	10	5	7	4	0	1	2	0	39	1908.....	0	0	1	2	1	1	10	13	0	0	0	0	28		
1909.....	3	0	0	7	3	6	6	8	3	0	2	0	39	1909.....	0	2	0	0	6	9	8	3	1	0	1	0	30		
1910.....	0	0	1	4	5	4	8	6	2	2	0	0	32	1910.....	0	1	0	0	2	6	11	1	1	0	0	0	21		
1911.....	0	1	1	1	9	5	6	4	5	5	0	0	37	1911.....	0	0	1	3	4	12	4	4	3	0	0	0	31		
1912.....	0	0	0	4	6	6	9	11	6	3	1	0	46	1912.....	0	0	1	0	10	11	18	2	3	0	1	0	46		
1913.....	0	0	1	3	4	7	9	4	4	2	1	0	34	1913.....	0	1	0	3	1	8	9	6	0	0	0	0	36		
1904-1913....	5	6	13	32	52	62	77	59	35	17	7	0	365	1904-1913....	2	5	2	10	12	47	88	106	33	18	4	1	328		
1871-1913....	8	12	41	87	203	241	262	185	108	53	12	1	1,213	1883-1913....	4	8	5	19	30	104	210	213	85	37	7	1	723		
Dodge City, Ford County, Kans.																													
[Lat., 37° 45' N.; long., 100° 00' W. Elevation, 2,490 feet.]																													
1876-1903....	0	3	19	69	145	169	169	139	50	35	4	2	804	1883-1903....	5	7	10	31	106	127	131	106	64	31	7	3	628		
1904.....	0	0	1	5	11	13	19	11	6	0	0	0	66	1904.....	0	3	4	0	5	9	8	6	3	2	0	0	40		
1905.....	0	0	3	1	5	4	8	5	2	0	1	0	29	1905.....	0	0	0	1	5	6	9	5	5	1	0	0	38		
1906.....	0	0	0	3	7	9	5	6	4	0	0	2	36	1906.....	0	0	0	1	5	10	5	5	3	0	0	0	32		
1907.....	0	0	1	2	2	10	7	6	8	3	0	0	39	1907.....	1	0	3	1	4	4	7	3	7	2	0	1	33		
1908.....	0	0	0	4	7	12																							

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June, July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.		
Eureka, Humboldt County, Cal.																												
[Lat., 40° 48' N.; long., 124° 11' W. Elevation, 62 feet.]																												
1887-1903....	1	7	4	1	4	1	1	3	2	1	4	11	40	1890-1903....	2	1	7	27	63	60	46	42	33	12	2	1	296	
1904.....	0	0	4	0	0	0	1	0	1	0	1	0	7	1904.....	0	0	0	3	8	5	7	8	3	0	0	0	35	
1905.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1905.....	0	1	0	5	1	2	8	8	3	2	0	0	36	
1906.....	1	1	1	0	0	0	0	0	0	0	0	0	3	1906.....	0	0	1	5	8	4	8	5	1	0	3	0	35	
1907.....	0	0	2	0	0	0	0	0	0	2	0	6	10	1907.....	1	0	0	1	5	8	5	7	3	1	3	0	42	
1908.....	0	1	0	0	0	0	0	0	0	1	0	0	0	1908.....	0	0	0	2	3	2	3	6	7	4	1	0	32	
1909.....	1	2	0	0	0	0	0	0	0	0	1	0	4	1909.....	2	0	0	0	5	8	5	7	3	1	3	0	48	
1910.....	1	0	0	0	0	0	0	0	0	0	0	0	1	1910.....	0	0	0	2	3	2	3	6	7	4	1	0	48	
1911.....	1	0	0	0	0	0	0	0	0	0	0	0	1	1911.....	0	0	0	0	3	10	8	7	9	2	0	1	50	
1912.....	0	0	0	1	0	0	0	0	0	0	0	0	2	1912.....	0	0	0	1	4	12	6	6	6	3	1	1	50	
1913.....	0	0	0	0	0	0	1	0	1	0	0	0	2	1913.....	1	0	0	5	2	4	8	10	10	2	3	1	46	
1904-1913....	4	4	7	1	0	0	2	0	2	4	1	8	33	1906-1913....	4	1	14	26	54	48	63	56	31	15	11	1	324	
1887-1913....	5	11	11	2	4	1	3	3	4	5	5	19	73	1890-1913....	6	2	21	53	117	108	109	114	68	29	13	2	620	
Fort Smith, Sebastian County, Ark.																												
[Lat., 35° 22' N.; long., 94° 24' W. Elevation, 457 feet.]																												
1883-1903....	18	26	63	100	122	132	124	115	58	37	35	10	840	1887-1903....	1	0	10	28	74	85	98	63	48	22	4	0	433	
1904.....	1	3	9	7	11	12	15	12	6	2	0	0	78	1904.....	0	0	2	0	6	3	6	5	7	3	0	0	32	
1905.....	1	0	4	5	15	9	10	9	8	5	1	0	67	1905.....	0	0	2	3	3	11	10	10	4	1	0	0	44	
1906.....	3	1	6	7	9	12	9	18	8	0	3	1	77	1906.....	0	0	0	2	7	7	8	7	1	0	0	0	39	
1907.....	0	2	4	6	12	11	6	8	4	2	0	0	55	1907.....	0	0	0	2	3	5	5	5	1	0	0	0	29	
1908.....	1	2	1	3	10	9	6	8	3	1	8	0	50	1908.....	0	0	0	2	3	5	6	3	0	2	0	0	21	
1909.....	2	3	2	8	7	12	3	2	4	3	1	1	48	1909.....	0	0	0	2	5	6	4	6	1	1	0	0	26	
1910.....	1	1	2	5	8	8	5	3	5	3	2	0	47	1910.....	0	0	0	1	2	2	4	6	6	2	0	0	23	
1911.....	1	2	1	6	4	7	5	6	3	1	2	0	38	1911.....	0	0	1	0	8	5	7	7	2	1	0	0	38	
1912.....	2	1	1	7	3	9	10	6	4	2	1	0	46	1912.....	0	0	0	3	10	2	15	6	3	2	0	0	45	
1913.....	2	1	5	5	8	9	7	5	7	3	1	0	53	1913.....	0	0	3	2	4	8	10	6	6	2	0	0	41	
1904-1913....	14	16	35	59	87	98	75	82	52	22	17	2	559	1904-1913....	0	0	10	15	51	54	71	67	50	16	4	0	338	
1888-1913....	32	42	98	159	209	230	190	197	110	39	52	12	1,399	1887-1913....	1	0	20	43	125	139	109	130	98	38	8	0	771	
Fresno, Fresno County, Cal.																												
[Lat., 36° 43' N.; long., 119° 49' W. Elevation, 330 feet.]																												
1888-1903....	1	3	8	2	4	1	1	3	10	5	1	2	41	1892-1903....	6	5	22	42	94	97	92	65	57	16	11	3	510	
1904.....	0	0	2	1	0	0	0	0	1	2	0	0	6	1904.....	0	1	5	2	5	9	10	12	7	3	0	1	55	
1905.....	0	0	0	1	0	0	0	0	0	0	0	0	1	1905.....	1	0	4	4	5	5	8	12	8	5	1	0	53	
1906.....	0	3	0	0	0	0	0	0	0	0	0	0	3	1906.....	0	1	1	7	9	9	7	5	5	1	1	47		
1907.....	0	0	0	0	1	0	0	0	0	0	0	0	1	1907.....	2	0	6	6	6	10	11	11	4	1	0	1	58	
1908.....	0	1	0	0	0	0	0	0	0	1	0	0	3	1908.....	2	0	6	6	14	10	9	7	2	1	0	61		
1909.....	0	0	1	0	0	0	0	0	0	0	1	1	3	1909.....	2	2	2	2	7	6	10	6	5	3	1	49		
1910.....	0	0	0	1	0	0	1	0	0	1	0	0	3	1910.....	0	1	0	0	4	9	8	9	6	2	1	0	45	
1911.....	0	1	0	0	0	0	0	0	0	0	0	0	1	1911.....	1	1	4	5	6	10	7	7	3	2	0	0	54	
1912.....	1	0	3	2	3	0	0	0	0	0	0	0	9	1912.....	0	0	2	6	11	12	6	10	4	4	0	0	55	
1913.....	0	0	2	1	1	0	0	0	2	0	0	0	0	1913.....	0	0	6	1	8	11	6	9	4	1	3	0	49	
1904-1913....	1	5	6	5	6	2	1	0	4	3	2	2	37	1904-1913....	6	8	36	48	79	94	79	77	56	24	15	4	526	
1888-1913....	2	8	14	7	10	3	2	3	14	8	3	4	78	1892-1913....	12	13	58	90	173	191	171	142	113	40	26	7	1,036	
Galveston, Galveston County, Tex.																												
[Lat., 29° 18' N.; long., 94° 50' W. Elevation, 69 feet.]																												
1884-1903....	23	44	47	62	76	90	133	146	68	33	30	25	777	1889-1903....	0	1	7	17	59	87	94	61	37	4	3	0	370	
1904.....	1	1	5	6	6	8	10	8	1	2	1	1	55	1904.....	0	1	0	1	8	9	12	7	3	2	0	0	43	
1905.....	1	1	2	5	6	2	8	10	5	1	1	0	42	1905.....	0	0	2	4	5	6	13	10	1	1	0	0	42	
1906.....	2	0	1	2	3	1	2	13	5	6	1	0	1	30	1906.....	0	0	9	3	1	12	8	9	3	1	0	0	37
1907.....	0	1	2	5	8	0	2	8	7	5	5	2	15	1907.....	0	0	1	1	1	5	11	4	7	0	0	1	31	
1908.....	0	6	1	5	2	5	16	8	7	0	1	1	52	1908.....	1	0	3	2	6	5	12	5	1	2	0	0	37	
1909.....	0	3	3	6	6	9	2	6	4	2	2	3	48	1909.....	0	0	0	1	3	8	3	2	0	2	0	0	19	
1910.....																												

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1915, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Hatteras, Dare County, N. C.																											
[Lat., 35° 15' N.; long., 75° 40' W. Elevation, 11 feet.]																											
1886-1903	6	8	26	28	59	67	74	70	26	16	11	10	401	1871-1903	6	23	66	84	177	206	183	163	90	45	25	12	1,082
1904	0	0	4	6	6	4	13	4	4	0	0	0	41	1904	0	1	6	4	3	9	7	5	9	2	0	1	47
1905	1	1	1	6	7	1	3	0	1	0	0	0	31	1905	0	0	2	4	9	7	6	9	3	1	0	0	41
1906	1	1	1	3	3	6	5	4	3	2	2	0	31	1906	1	0	0	3	8	7	8	10	5	1	0	0	41
1907	0	1	2	2	2	5	7	7	8	2	2	0	0	1907	0	0	6	3	4	11	9	4	4	1	0	2	44
1908	1	1	3	3	4	7	3	9	1	2	0	0	34	1908	0	1	5	3	7	6	7	4	0	1	3	0	37
1909	1	2	2	5	3	7	1	9	1	1	3	0	38	1909	2	1	2	4	9	9	9	8	5	1	2	0	52
1910	3	0	1	4	4	8	7	9	3	3	0	0	42	1910	0	0	0	3	4	6	8	4	5	0	3	0	33
1911	0	0	3	1	1	6	5	4	9	0	0	0	29	1911	2	0	1	9	5	12	9	5	11	3	2	0	59
1912	0	1	0	3	7	6	3	3	1	0	0	1	35	1912	0	2	3	7	9	11	11	9	5	2	1	0	60
1913	1	1	2	1	4	4	8	7	3	2	0	2	35	1913	1	0	6	2	6	11	12	7	4	1	3	0	53
1904-1913	8	8	22	34	44	59	62	57	36	12	9	2	253	1904-1913	6	5	31	42	62	89	86	65	31	13	14	3	467
1886-1913	11	16	48	62	103	126	136	127	62	28	20	12	754	1871-1913	12	30	97	126	239	295	269	238	141	53	39	15	1,549
Havre, Hill County, Mont.																											
[Lat., 48° 34' N.; long., 109° 40' W. Elevation, 2,492 feet.]																											
1882-1903	0	0	0	7	55	104	98	77	30	0	2	0	373	1872-1903	18	33	73	86	181	324	367	360	130	29	24	21	1,646
1904	0	0	0	0	2	7	4	5	1	0	0	0	19	1904	3	0	2	4	6	14	20	15	8	3	1	0	76
1905	0	0	0	1	0	6	11	9	1	0	0	0	28	1905	1	1	5	7	18	12	21	15	7	0	1	0	88
1906	0	0	0	0	1	6	5	5	0	0	0	0	17	1906	1	0	1	2	4	17	18	14	6	3	0	0	66
1907	0	0	0	0	2	8	3	4	2	0	0	0	19	1907	0	1	2	4	12	9	23	22	17	1	0	3	94
1908	0	0	0	1	3	9	5	7	5	0	0	0	30	1908	0	1	2	9	10	13	18	12	6	2	0	0	73
1909	0	0	0	0	3	8	10	8	3	0	0	0	32	1909	1	4	5	3	9	12	20	15	7	1	1	0	78
1910	0	0	1	3	0	11	5	3	2	0	0	0	25	1910	1	4	3	3	8	14	23	16	9	2	0	0	82
1911	0	0	0	0	0	10	6	5	5	0	0	0	26	1911	0	0	2	1	0	16	17	18	6	4	1	1	66
1912	0	0	0	0	1	5	5	2	1	0	0	0	11	1912	1	4	4	7	12	13	14	17	13	3	0	0	88
1913	0	0	0	0	4	9	5	6	2	0	0	0	26	1913	2	3	5	2	7	11	24	19	8	1	0	2	84
1904-1913	0	0	1	5	16	79	59	57	19	0	0	0	236	1904-1913	10	18	31	42	86	131	197	163	87	20	3	7	735
1882-1913	0	0	1	12	71	183	157	134	49	0	2	0	609	1872-1913	28	51	104	128	267	455	564	523	217	49	27	28	2,441
Honolulu, Island of Oahu, Hawaiian Islands.																											
[Lat., 21° 19' N.; long., 157° 52' W. Elevation, 38 feet.]																											
(U. S. Weather Bureau station established Sept. 1, 1904.)																											
1904									(?)	(?)	(?)	(?)	1														
1905	0	0	0	0	0	0	0	0	0	0	1	0	1														
1906	0	0	1	0	0	0	0	0	0	0	0	1	2														
1907	5	1	0	0	0	0	0	0	0	0	0	0	1														
1908	0	1	0	0	0	0	0	0	1	0	0	0	2														
1909	0	2	0	0	0	0	0	0	0	1	0	1	5														
1910	1	0	0	0	0	0	0	0	0	1	0	1	1														
1911	1	2	0	0	1	1	0	0	0	0	0	0	0														
1912	0	0	0	0	0	0	0	0	0	0	0	0	0														
1913	1	0	0	0	0	1	0	0	1	3	1	0	7														
1905-1913	8	6	1	1	1	1	0	0	3	4	3	8	36														
Huron, Beadle County, S. Dak.																											
[Lat., 44° 21' N.; long., 98° 14' W. Elevation, 1,306 feet.]																											
1882-1903	0	0	5	46	92	176	173	147	77	19	2	0	742	1884-1903	4	4	40	80	129	144	135	115	92	39	14	6	802
1904	0	0	0	3	3	9	7	5	3	0	0	0	30	1904	0	2	4	3	6	9	7	11	6	3	0	1	52
1905	0	0	0	6	6	16	12	8	3	1	0	0	46	1905	0	0	4	4	6	7	7	10	5	5	0	1	52
1906	0	0	0	1	7	6	8	8	3	0	0	0	23	1906	1	1	2	1	8	8	12	12	4	2	0	0	51
1907	0	0	0	3	9	12	6	6	0	0	0	0	36	1907	2	0	4	1	4	11	13	8	5	2	0	1	51
1908	0	0	1	2	4	11	7	7	3	1	0	0	36	1908	0	1	4	4	13	10	12	8	3	2	3	0	57
1909	0	0	0	3	7	5	6	3	1	0	0	0	25	1909	2	2	2	6	9	10	5	4	5	4	4	1	54
1910	0	0	2	2	0	7	6	7	2	1	0	0	27	1910	0	0	2	4	10	7	10	7	1	0	0	44	
1911	0	0	1	1	5	10	9	9	6	0	0	0	41	1911	1	2	2	7	6	9	6	8	11	3	2	0	57
1912	0	0	0	3	6	3	8	7	5	0	0	0	32	1912	0	0	1	4	9	8	6	6	5	2	0	52	
1913	0																										

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
Key West, Monroe County, Fla.																												
[Lat., 24° 33' N.; long., 81° 48' W. Elevation, 14 feet.]																												
1884-1903....	14	21	26	29	54	87	138	197	134	44	20	17	781	1888-1903....	2	17	30	33	78	99	112	89	39	18	9	7	533	
1904.....	0	1	1	2	2	11	7	7	4	2	1	1	39	1904.....	0	1	6	3	5	11	12	6	7	0	0	0	51	
1905.....	0	0	2	4	4	4	9	11	14	3	0	6	45	1905.....	0	0	0	6	10	7	9	8	14	2	1	2	45	
1906.....	2	3	2	1	6	5	13	18	9	3	2	0	64	1906.....	1	1	1	4	5	9	8	14	10	0	0	0	53	
1907.....	0	0	0	1	6	14	12	18	14	3	2	2	67	1907.....	3	0	3	4	4	15	10	9	6	0	3	0	57	
1908.....	1	2	1	1	3	13	9	12	14	4	1	0	1	60	1908.....	0	2	5	5	9	15	12	8	5	1	3	0	54
1909.....	0	1	0	3	8	15	7	15	9	1	0	0	42	1909.....	1	4	4	7	9	15	12	6	12	1	1	1	69	
1910.....	1	2	1	0	3	9	11	9	5	1	0	0	45	1910.....	0	0	3	3	6	11	10	11	11	3	1	1	66	
1911.....	0	0	2	3	3	3	13	10	8	2	1	0	45	1911.....	0	2	3	7	6	11	15	10	10	3	0	0	68	
1912.....	1	1	4	0	4	11	6	13	6	7	0	1	54	1912.....	0	4	1	10	11	12	15	10	10	3	0	0	68	
1913.....	0	1	0	4	3	7	14	12	7	2	0	0	50	1913.....	1	0	5	4	8	12	16	12	3	1	1	0	63	
1904-1913....	5	11	13	19	42	92	101	120	90	28	7	11	539	1904-1913....	6	14	31	53	73	108	125	93	62	7	13	1	587	
1884-1913....	19	32	39	48	96	179	239	317	224	72	27	28	1,320	1888-1913....	8	31	61	86	151	207	238	182	101	25	22	8	1,120	
Knoxville, Knox County, Tenn.																												
[Lat., 35° 56' N.; long., 83° 58' W. Elevation, 1,007 feet.]																												
1882-1903....	7	18	55	56	108	181	171	143	47	13	9	4	812	1880-1903....	27	33	76	99	129	154	163	120	53	26	30	27	937	
1904.....	0	3	5	1	2	8	10	13	3	0	0	1	46	1904.....	1	4	8	7	5	13	13	8	2	3	0	0	64	
1905.....	0	0	3	8	6	12	14	12	2	0	1	0	58	1905.....	1	0	2	11	11	8	11	11	6	2	1	1	66	
1906.....	0	0	0	5	8	11	14	18	8	0	3	0	67	1906.....	2	2	4	7	8	11	11	12	9	2	3	3	66	
1907.....	0	1	4	4	4	10	9	12	5	1	2	1	53	1907.....	2	4	4	7	8	9	3	8	3	2	0	0	50	
1908.....	1	0	5	2	8	6	14	9	2	1	3	0	53	1908.....	1	4	5	7	6	12	11	5	2	0	0	0	63	
1909.....	1	3	7	7	13	14	10	6	4	2	1	1	60	1909.....	3	6	6	8	7	9	8	2	0	2	3	3	63	
1910.....	0	2	3	5	9	10	16	10	13	0	2	1	60	1910.....	0	2	3	6	7	14	13	10	6	3	0	1	65	
1911.....	0	2	4	7	6	10	10	9	2	0	0	1	60	1911.....	0	2	1	10	2	10	8	5	1	0	0	0	48	
1912.....	0	2	0	8	10	12	12	9	4	1	1	1	60	1912.....	1	4	5	10	4	11	10	5	1	0	0	0	59	
1913.....	0	2	3	1	8	11	13	6	1	1	0	0	46	1913.....	3	2	5	4	4	7	13	5	8	5	1	0	57	
1904-1913....	2	15	34	48	74	104	122	105	51	8	13	5	531	1904-1913....	14	30	41	74	61	98	97	84	59	19	16	8	601	
1882-1913....	9	33	89	104	182	285	293	248	98	21	22	9	1,393	1880-1913....	41	63	117	173	190	252	260	204	112	45	46	35	1,538	
La Crosse, La Crosse County, Wis.																												
[Lat., 43° 49' N.; long., 91° 15' W. Elevation, 631 feet.]																												
1875-1903....	1	3	24	60	103	166	141	118	79	38	7	0	740	1877-1903....	5	2	7	5	5	3	2	3	3	1	1	2	39	
1904.....	0	0	2	2	4	7	6	4	10	1	0	0	36	1904.....	0	0	0	0	0	0	0	3	0	0	0	0	3	
1905.....	0	0	0	2	6	13	5	9	4	1	0	0	40	1905.....	0	3	2	3	0	0	0	0	0	0	0	0	5	
1906.....	0	0	1	3	8	7	6	7	8	0	0	0	40	1906.....	0	0	1	2	0	0	1	0	0	1	0	0	7	
1907.....	0	0	2	0	7	6	7	7	8	0	0	0	37	1907.....	0	0	2	0	1	0	1	0	0	1	0	0	7	
1908.....	0	0	1	2	10	8	8	5	3	1	1	0	39	1908.....	1	1	0	0	0	0	1	3	1	0	0	0	3	
1909.....	1	0	0	7	5	7	3	11	4	2	2	0	42	1909.....	1	0	2	0	0	0	0	0	0	0	0	0	3	
1910.....	0	0	0	1	2	6	5	15	4	0	0	0	58	1910.....	1	0	0	0	0	0	1	1	0	0	0	0	4	
1911.....	0	0	0	0	10	10	10	9	12	5	2	0	58	1911.....	1	0	0	0	0	0	0	0	0	0	0	0	1	
1912.....	0	0	0	7	12	4	12	10	5	1	0	0	50	1912.....	0	0	2	0	0	0	0	0	0	0	0	0	2	
1913.....	0	0	2	1	10	6	14	6	5	5	1	0	50	1913.....	2	1	0	1	0	0	0	0	0	0	0	0	4	
1904-1913....	1	0	8	25	74	70	77	83	63	16	6	1	424	1904-1913....	6	6	9	6	1	1	1	5	5	4	1	0	44	
1875-1913....	2	3	32	85	177	236	218	201	142	54	13	1	1,164	1877-1913....	11	8	16	11	6	4	3	8	8	5	2	2	83	
Lander, Fremont County, Wyo.																												
[Lat., 42° 50' N.; long., 108° 45' W. Elevation, 5,408 feet.]																												
1892-1903....	0	0	0	3	24	45	42	47	13	3	0	0	177	1890-1903....	4	13	36	40	80	102	94	86	35	14	6	3	503	
1904.....	0	0	0	1	2	6	8	5	1	0	0	0	23	1904.....	0	1	6	3	3	9	3	3	7	1	0	0	41	
1905.....	0	0	0	0	5	3	9	9	0	0	0	0	26	1905.....	0	0	3	8	12	8	9	6	3	2	2	0	53	
1906.....	0	0	0	1	3	3	6	7	3	0	0	0	23	1906.....	1	1	2	5	6	7	11	12	6	0	3	1	55	
1907.....	0	0	0	0	1	6	2	4	3	0	0	0	18	1907.....	4	0	2	5	5	11	9	5	5	1	0	0	48	
1908.....	0	0	0	2	0	7	2	5	4	0	0	0	20	1908.....	1	2	7	5</td										

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Lynchburg, Campbell County, Va.																											
[Lat., 37° 25' N.; long., 79° 9' W. Elevation, 681 feet.]																											
1884-1903...	0	10	12	23	99	116	137	109	33	5	7	0	553	1893-1903...	0	0	7	32	59	68	68	77	45	34	3	0	393
1904...	0	0	1	1	3	10	0	6	3	0	0	0	33	1904...	0	0	0	0	5	9	4	5	3	2	0	0	28
1905...	0	0	0	3	7	12	6	2	0	0	0	0	37	1905...	0	0	0	1	6	12	6	10	4	1	0	0	40
1906...	0	0	1	4	2	10	7	11	4	0	0	4	39	1906...	0	0	0	3	9	5	8	7	0	0	0	0	39
1907...	0	0	2	3	3	7	9	3	5	0	0	0	32	1907...	0	0	1	0	3	8	6	6	6	2	0	0	32
1908...	0	0	1	3	5	7	7	6	0	0	0	0	28	1908...	0	0	1	2	8	9	6	4	6	1	1	0	38
1909...	0	1	0	3	3	17	2	3	1	2	0	0	32	1909...	1	0	0	2	5	10	2	12	7	2	0	0	41
1910...	0	1	0	4	6	6	12	3	4	0	0	0	36	1910...	0	0	0	2	1	4	3	9	2	2	0	0	23
1911...	0	0	1	1	5	9	9	7	10	1	2	0	35	1911...	0	0	0	1	12	11	8	3	0	0	0	0	53
1912...	0	1	2	4	3	8	9	4	4	0	0	0	33	1912...	0	0	0	3	8	13	4	0	0	0	0	0	33
1913...	0	0	1	1	5	9	8	9	1	0	0	0	34	1913...	0	0	2	2	4	5	12	3	3	2	1	0	34
1894-1913...	0	3	9	27	42	90	82	61	25	4	0	0	343	1904-1913...	1	0	4	16	56	75	67	80	50	15	2	0	366
1884-1913...	0	13	21	55	141	206	219	170	58	9	7	0	899	1893-1913...	1	0	11	48	115	143	135	157	95	49	5	0	759
Marquette, Marquette County, Mich.																											
[Lat., 46° 34' N.; long., 87° 24' W. Elevation, 734 feet.]																											
1876-1903 ¹² ...	0	0	6	27	47	90	99	S2	54	16	3	0	424	1881-1903...	27	47	66	76	118	193	255	222	76	29	20	34	1,163
1904...	0	0	0	1	5	6	4	5	2	0	0	0	23	1904...	2	3	5	1	3	9	18	9	4	1	1	0	56
1905...	0	0	2	1	3	6	5	6	2	1	0	0	23	1905...	1	1	4	4	8	11	16	20	10	1	1	1	78
1906...	0	0	0	0	0	7	6	6	3	0	0	0	28	1906...	2	3	6	1	8	14	19	16	16	2	1	1	87
1907...	0	0	3	0	3	8	7	5	1	0	0	0	27	1907...	0	3	3	5	9	14	18	21	8	1	1	4	87
1908...	0	0	1	1	2	6	4	3	3	1	0	0	21	1908...	2	1	3	10	7	16	16	9	9	1	0	0	75
1909...	0	0	0	0	2	5	7	5	1	0	1	0	21	1909...	0	5	3	7	10	13	12	11	14	1	2	1	79
1910...	0	0	3	1	2	2	4	4	3	1	0	0	19	1910...	1	5	3	2	6	14	14	12	12	3	1	0	73
1911...	0	0	0	0	6	7	9	3	2	0	1	0	28	1911...	0	2	2	4	8	14	15	14	9	4	1	0	73
1912...	0	0	0	0	4	2	7	2	5	0	0	0	20	1912...	1	4	5	10	4	7	19	14	6	3	1	1	75
1913...	0	0	1	2	1	8	8	4	2	3	0	0	29	1913...	3	5	7	3	6	12	19	9	8	1	0	1	74
1904-1913...	0	0	10	6	33	57	61	43	24	6	2	0	242	1904-1913...	12	32	41	47	67	124	166	135	96	18	10	9	757
1876-1913...	0	0	16	33	80	147	160	125	78	22	5	0	666	1881-1913...	39	79	107	123	185	317	421	357	172	47	30	43	1,920
Memphis, Shelby County, Tenn.																											
[Lat., 35° 9' N.; long., 90° 3' W. Elevation, 399 feet.]																											
1882-1903...	23	35	75	85	117	134	157	117	51	22	25	19	860	1884-1903 ¹⁴ ...	16	42	60	69	115	194	216	188	52	18	18	18	1,006
1904...	1	1	6	4	6	11	15	5	1	1	0	2	53	1904...	2	3	4	2	3	6	8	17	2	0	1	1	49
1905...	1	0	2	8	9	12	7	8	4	2	2	0	55	1905...	1	0	2	5	10	10	11	8	2	2	0	0	51
1906...	2	2	2	6	9	4	9	7	5	0	3	1	50	1906...	3	3	5	0	6	11	11	10	12	1	2	0	64
1907...	5	2	5	5	4	8	8	5	4	1	1	2	47	1907...	0	1	2	5	11	10	11	8	4	2	3	1	58
1908...	2	2	4	7	7	8	12	8	3	1	3	1	60	1908...	2	1	2	8	8	12	13	8	3	2	2	0	61
1909...	3	5	6	7	6	13	5	5	4	2	4	0	60	1909...	2	6	5	12	17	7	11	8	0	3	2	3	82
1910...	1	2	4	6	3	12	11	5	6	4	1	2	57	1910...	3	4	3	4	5	12	16	8	8	2	3	1	68
1911...	0	1	0	5	6	9	8	8	1	0	0	0	38	1911...	0	1	1	5	4	14	11	7	11	2	1	0	57
1912...	0	3	2	6	6	9	8	9	6	1	0	0	56	1912...	0	3	3	9	6	10	10	14	8	0	0	1	64
1913...	2	2	3	1	2	8	9	5	6	1	0	0	39	1913...	3	5	8	1	8	13	16	10	6	0	0	0	70
1904-1913...	17	20	34	55	59	90	92	65	40	13	18	8	509	1904-1913...	16	27	38	44	73	115	114	101	64	11	14	7	624
1882-1913...	40	55	109	140	178	224	249	182	91	35	41	27	1,369	1883-1913...	32	69	98	113	188	309	330	289	116	29	32	25	1,633
Milwaukee, Milwaukee County, Wis.																											
[Lat., 43° 2' N.; long., 87° 54' W. Elevation, 681 feet.]																											
1871-1903 ¹² ...	3	6	26	66	134	168	167	125	77	48	17	2	839	1887-1903...	1	9	7	11	20	33	44	38	17	6	2	5	192
1904...	0	0	4	2	8	7	7	11	3	0	0	0	50	1904...	0	0	0	5	3	3	5	3	1	0	2	0	21
1905...	0	0	3	3	7	10	7	10	2	1	0	0	43	1905...	0	0	0	1	3	3	4	4	0	0	0	0	15
1906...	2	0	0	3	4	5	4	9	4	0	0	0	31	1906...	0	0	0	1	2	5	4	4	5	1	1	0	23
1907...	1	0	3	4	3	9	8	5	4	3	0	0	40	1907...	2	0	1	3	3	3	7	1	2	0	0	0	22
1908...	0	0	2	5	6	8	5	4	0	1	1																

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Narragansett Pier, Washington County, R. I.																											
[Lat., 41° 19' N.; long., 71° 17' W. Elevation, 33 feet.]																											
1892-1903....	0	3	3	11	24	26	36	33	17	4	1	1	159	1881-1903....	3	5	13	29	65	117	147	108	47	13	8	2	557
1904.....	0	0	0	1	2	3	5	2	1	0	0	0	14	1904.....	0	0	0	1	3	7	9	9	1	0	0	0	30
1905.....	0	0	0	2	2	3	7	5	1	0	1	0	21	1905.....	0	0	0	5	4	7	9	9	2	0	0	0	36
1906.....	0	0	0	2	1	3	3	2	2	0	1	0	14	1906.....	1	0	0	2	6	8	10	5	2	1	0	0	37
1907.....	1	0	1	4	4	1	2	0	5	0	0	0	18	1907.....	0	0	1	2	6	2	7	3	0	0	0	0	30
1908.....	0	0	2	0	0	4	5	3	0	0	0	0	14	1908.....	0	0	2	1	3	4	9	4	2	0	0	0	25
1909.....	0	0	0	3	3	3	4	1	0	0	0	0	14	1909.....	0	0	1	4	4	4	3	0	1	0	0	0	19
1910.....	0	1	2	0	2	3	3	4	1	2	0	0	18	1910.....	0	0	2	4	4	4	1	3	1	0	0	0	15
1911.....	0	1	1	0	2	5	3	3	1	0	1	0	17	1911.....	0	1	2	0	4	9	9	3	1	0	0	0	29
1912.....	0	1	1	1	3	1	4	4	2	1	1	0	19	1912.....	0	1	2	5	4	3	7	8	3	1	1	0	35
1913.....	1	2	0	3	1	1	3	6	2	1	0	0	20	1913.....	1	1	1	2	1	2	6	9	3	2	0	0	28
1904-1913....	2	5	7	13	20	27	38	33	16	4	4	0	163	1904-1913....	2	3	9	24	39	50	70	54	24	8	1	0	281
1892-1913....	2	8	10	24	44	53	74	66	33	8	5	1	328	1881-1914....	5	8	22	53	101	167	217	162	71	21	9	2	841
Nashville, Davidson County, Tenn.																											
[Lat., 36° 10' N.; long., 86° 47' W. Elevation, 546 feet.]																											
1871-1903 ¹⁵ ..	24	54	100	138	187	271	259	167	78	29	28	16	1,351	1885-1903....	2	6	23	36	98	99	121	107	25	11	6	3	537
1904.....	1	2	8	5	6	12	11	7	5	0	0	0	57	1904.....	1	2	0	3	7	11	10	11	4	0	0	0	49
1905.....	0	0	3	6	8	8	8	5	5	1	2	1	47	1905.....	0	0	3	7	5	13	10	4	1	0	0	0	45
1906.....	0	2	2	9	6	10	7	15	3	1	2	0	63	1906.....	0	1	0	6	5	6	9	10	2	0	0	0	39
1907.....	1	1	4	5	7	7	9	10	3	3	1	1	52	1907.....	0	1	2	3	6	8	9	8	5	0	1	1	44
1908.....	0	2	2	4	8	7	12	8	3	0	3	0	49	1908.....	0	2	4	4	3	3	5	5	1	0	1	0	34
1909.....	1	5	5	6	5	15	8	6	3	3	2	1	60	1909.....	0	1	1	4	3	16	5	5	0	1	2	0	38
1910.....	0	1	7	6	10	13	18	7	8	2	2	1	75	1910.....	0	1	1	4	5	10	7	6	3	0	0	0	37
1911.....	2	2	4	6	4	10	10	9	10	0	0	1	58	1911.....	0	1	4	2	2	10	8	8	1	2	1	0	39
1912.....	0	2	1	11	4	8	16	8	6	1	0	1	58	1912.....	0	1	0	2	9	5	7	3	1	0	0	0	37
1913.....	2	2	6	1	8	12	7	1	0	2	0	0	48	1913.....	1	0	2	0	6	9	14	6	4	1	0	1	44
1904-1913....	7	19	42	59	66	102	106	82	52	11	14	6	566	1904-1913....	2	8	15	30	59	83	91	78	27	6	5	2	406
1871-1913....	31	73	142	197	253	373	365	249	130	40	42	22	1,917	1885-1913....	4	14	38	66	157	182	212	185	52	17	11	5	948
New Haven, New Haven County, Conn.																											
[Lat. 41° 18' N.; long. 72° 58' W. Elevation, 106 feet.]																											
1873-1903....	1	9	20	34	71	113	149	111	46	17	5	2	578	1887-1903 ¹⁶ ..	0	1	1	0	29	73	89	61	35	9	0	0	307
1904.....	0	0	0	1	3	6	4	6	3	0	0	0	23	1904.....	0	0	1	0	3	3	6	6	4	0	0	0	23
1905.....	0	0	0	3	2	6	9	5	1	0	0	1	27	1905.....	0	0	0	0	3	4	12	7	0	0	1	0	27
1906.....	0	0	0	2	3	8	11	5	4	1	1	0	35	1906.....	0	0	0	0	7	9	7	6	3	2	0	0	34
1907.....	1	0	2	1	4	6	4	1	6	0	0	0	25	1907.....	0	0	0	0	1	5	7	4	4	0	0	0	21
1908.....	0	1	2	1	2	4	7	6	1	1	0	0	23	1908.....	0	0	1	2	2	5	5	4	0	1	0	0	20
1909.....	0	0	0	1	6	3	4	2	1	2	1	0	20	1909.....	1	0	0	1	1	3	3	2	0	0	0	0	13
1910.....	0	0	2	2	5	2	4	2	0	0	0	0	21	1910.....	0	0	0	2	3	5	7	4	2	1	0	0	24
1911.....	0	1	1	0	4	7	5	3	2	0	0	0	23	1911.....	0	0	0	0	5	4	9	6	3	0	0	0	27
1912.....	0	1	2	2	5	4	10	4	3	1	1	0	33	1912.....	0	0	0	1	5	4	8	6	2	0	0	0	30
1913.....	1	1	4	0	1	3	6	9	2	2	0	0	23	1913.....	0	0	2	0	2	3	10	4	2	1	0	0	23
1904-1913....	2	4	13	13	35	69	64	45	25	7	3	1	261	1904-1913....	1	0	4	6	32	44	74	49	24	7	0	1	242
1873-1913....	3	13	33	47	106	162	213	156	71	21	8	3	839	1887-1913....	1	1	5	15	61	117	163	110	59	16	0	1	549
New Orleans, Orleans Parish, La.																											
[Lat. 29° 53' N.; long. 90° 00' W. Elevation, 51 feet.]																											
1871-1903....	37	49	75	80	138	195	261	230	100	26	21	37	1,249	1875-1903....	0	0	8	51	113	184	174	132	48	12	1	0	723
1904.....	1	2	5	3	4	11	19	10	9	1	0	2	67	1904.....	0	0	1	1	8	10	11	5	1	1	0	0	38
1905.....	2	1	4	4	6	9	7	17	12	0	1	4	67	1905.....	0	0	2	1	12	14	12	13	5	2	0	0	60
1906.....	3	1	5	3	3	12	13	15	12	1	1	0	69	1906.....	0	0	1	6	5	7	8	1	0	0	0	46	
1907.....	1	3	3	5	11	12	10	16	5	2	2	5	75	1907.....	0	0	0	0	10	11	19	10	3	0	0	0	53
1908.....	2	4	2	5	4	10	17	11	11	0	0	0	66	1908.....	0	0	0	3	6	14	10	12	2	1	0	0	48
1909.....	2</																										

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1915, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Ap	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Year.
Oklahoma, Oklahoma County, Okla.																											
[Lat., 35° 20' N.; long., 97° 30' W. Elevation, 1,314 feet.]																											
1891-1903....	6	10	21	44	89	67	43	50	35	16	15	8	407	1894-1903....	5	21	31	20	40	64	92	101	28	7	9	13	431
1904.....	2	0	3	6	10	9	5	4	4	2	0	0	45	1904.....	3	2	4	2	4	10	19	19	7	2	1	2	75
1905.....	0	0	3	4	11	5	9	7	2	3	1	0	45	1905.....	3	0	3	5	11	7	12	21	11	3	0	1	77
1906.....	0	2	5	8	9	9	12	13	9	0	0	0	67	1906.....	3	2	7	1	5	14	20	16	17	3	1	0	89
1907.....	0	1	1	3	5	10	3	4	5	2	0	0	34	1907.....	0	3	2	9	11	14	21	23	15	3	2	6	109
1908.....	0	3	1	9	10	13	6	9	4	3	1	0	49	1908.....	2	2	3	8	7	16	23	11	9	1	2	0	84
1909.....	0	1	2	7	6	12	5	4	4	2	1	0	49	1909.....	1	5	2	4	9	11	11	12	14	4	0	3	76
1910.....	0	0	1	3	7	5	3	4	4	2	0	0	29	1910.....	1	5	2	3	5	14	13	11	11	1	2	1	69
1911.....	0	1	0	5	5	7	10	2	2	2	0	0	34	1911.....	1	0	2	4	5	15	12	13	12	6	2	2	74
1912.....	0	1	3	6	7	8	4	3	3	2	0	0	42	1912.....	1	6	5	9	11	6	15	16	11	3	1	1	85
1913.....	0	2	4	2	7	9	4	3	7	2	1	1	42	1913.....	1	6	9	3	6	9	18	13	8	1	0	2	76
1904-1913....	2	11	23	53	77	87	61	57	44	23	9	1	448	1904-1913....	16	31	39	43	74	116	164	155	115	27	11	18	814
1891-1913....	8	21	47	97	166	154	104	107	79	39	24	9	885	1891-1913....	21	52	70	68	114	180	256	256	143	34	20	31	1,245
Omaha, Douglas County, Nebr.																											
[Lat., 41° 10' N.; long., 95° 56' W. Elevation, 1,105 feet.]																											
1873-1903....	0	4	38	83	161	293	175	139	92	45	7	4	951	1873-1903....	1	12	27	47	100	140	195	138	60	19	12	3	763
1904.....	0	0	1	6	8	8	10	9	7	4	0	0	53	1904.....	0	1	0	0	6	9	8	3	1	0	0	0	37
1905.....	0	0	1	7	13	15	8	10	5	5	1	0	51	1905.....	0	4	6	7	7	19	10	3	2	1	1	1	51
1906.....	0	0	1	8	9	12	9	6	7	1	1	1	58	1906.....	0	0	1	1	4	10	6	7	2	2	0	0	33
1907.....	0	1	0	3	5	9	16	9	6	2	0	0	51	1907.....	0	0	3	6	4	8	5	4	0	0	0	0	33
1908.....	0	0	2	4	14	13	8	10	0	1	1	0	54	1908.....	1	0	2	2	3	2	10	4	1	0	0	0	25
1909.....	1	2	2	7	4	13	7	6	9	1	3	0	58	1909.....	0	0	3	3	4	3	0	0	2	1	0	0	18
1910.....	0	0	1	2	8	7	10	6	4	1	0	0	33	1910.....	0	1	2	1	5	5	2	4	1	1	0	0	24
1911.....	0	0	1	3	10	14	5	12	7	1	0	0	32	1911.....	0	1	2	0	5	6	9	13	1	0	0	0	37
1912.....	0	0	1	2	7	11	5	11	10	5	0	0	31	1912.....	0	2	1	4	5	9	4	3	2	1	0	0	33
1913.....	0	0	3	2	11	9	4	5	3	1	0	0	47	1913.....	0	1	0	3	2	4	7	6	3	2	0	0	28
1904-1913....	1	3	12	37	77	98	90	86	60	27	7	1	493	1904-1913....	1	8	14	32	46	58	74	61	21	12	3	1	319
1873-1913....	1	7	50	120	238	301	265	225	152	72	14	5	1,450	1872-1913....	2	20	41	60	155	196	269	190	81	31	15	4	1,082
Oswego, Oswego County, N. Y.																											
[Lat., 43° 29' N.; long., 76° 35' W. Elevation, 335 feet.]																											
1871-1903....	2	3	8	23	51	101	116	89	50	23	5	3	476	1896-1903....	1	2	6	2	6	10	46	61	38	5	4	0	181
1904.....	0	1	1	1	3	9	6	5	1	0	0	0	36	1904.....	0	0	1	0	1	0	8	14	4	1	0	0	29
1905.....	0	0	1	4	8	8	4	3	1	0	0	0	39	1905.....	0	3	4	3	1	5	15	7	0	3	0	0	48
1906.....	0	0	0	1	5	10	6	3	2	3	0	0	33	1906.....	0	1	1	1	0	0	11	9	0	0	0	0	23
1907.....	0	0	2	1	1	3	4	3	2	0	0	0	24	1907.....	1	1	0	2	2	2	10	10	5	0	1	1	34
1908.....	0	0	3	1	6	6	5	6	3	1	0	0	31	1908.....	0	0	1	1	1	1	16	12	4	0	1	1	39
1909.....	1	0	0	1	5	2	6	3	2	0	0	0	29	1909.....	0	1	2	0	2	0	12	20	3	0	0	0	40
1910.....	0	0	3	1	3	5	6	3	0	0	0	0	38	1910.....	0	0	0	0	1	2	5	12	1	3	0	0	25
1911.....	0	1	1	0	7	8	6	5	2	0	0	0	35	1911.....	0	1	0	1	0	3	11	9	7	3	0	0	35
1912.....	0	0	2	0	6	2	5	7	5	0	0	0	32	1912.....	0	0	0	2	4	6	2	4	0	0	0	0	28
1913.....	1	0	3	2	2	3	7	3	1	2	0	0	24	1913.....	0	0	0	1	0	10	12	4	2	0	1	1	31
1904-1913....	2	4	13	11	42	56	53	32	16	2	0	0	216	1904-1913....	1	6	11	11	13	14	97	119	37	11	8	4	332
1871-1913....	4	7	21	34	93	157	181	142	82	41	7	3	77	1896-1913....	2	8	17	13	19	24	133	180	75	16	12	4	513
Palestine, Anderson County, Tex.																											
[Lat., 31° 45' N.; long., 95° 40' W. Elevation, 518 feet.]																											
1882-1903....	23	32	61	74	102	102	112	86	61	46	31	29	702	1891-1903....	0	0	2	23	44	107	118	91	31	11	2	0	429
1904.....	3	1	6	8	4	10	9	6	7	0	0	0	54	1904.....	0	0	0	1	3	7	9	8	0	0	0	0	28
1905.....	2	0	3	7	8	4	8	3	2	0	0	0	43	1905.....	0	0	0	2	7	6	5	7	3	1	0	0	40
1906.....	2	1	0	3	13	8	8	10	7	0	0	0	50	1906.....	0	0	0	2	7	6	5	7	5	0	0	32	
1907.....	2	4	2	8	9	9	8	1	2	0	0	0	67	1907.....	0	0	0	0	5	7	18	9	7	1	0	0	47
1908.....	1	3	1	11	8	6	11	6	7	3	0	0	55	1908.....	0	0	1	2	4	9	11	9	0				

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
Pittsburgh, Allegheny County, Pa.														Portland, Multnomah County, Oreg.														
[Lat., 40° 32' N.; long., 80° 02' W. Elevation, 842 feet.]														[Lat., 45° 32' N.; long., 122° 43' W. Elevation, 57 feet.]														
1886-1903....	3	6	17	42	91	138	144	97	42	11	5	3	599	1872-1903....	1	1	2	4	18	17	9	18	7	2	0	2	81	
1904.....	0	2	3	2	7	10	9	8	2	2	0	0	45	1904.....	0	1	0	0	1	0	0	1	0	0	0	0	0	3
1905.....	0	0	1	3	8	10	9	9	3	1	0	0	45	1905.....	1	1	0	1	6	1	0	1	2	0	0	0	0	13
1906.....	0	0	0	3	5	14	8	13	5	1	0	0	49	1906.....	0	1	0	0	1	0	2	0	0	1	0	0	0	5
1907.....	1	1	6	2	5	8	8	2	4	0	0	0	37	1907.....	0	0	0	0	0	1	2	1	0	0	0	0	0	4
1908.....	2	0	4	3	9	9	14	7	1	0	0	0	49	1908.....	0	0	0	0	0	0	0	0	1	0	0	0	0	1
1909.....	1	2	1	6	4	9	8	5	2	1	0	0	39	1909.....	0	0	0	0	0	0	0	0	1	1	0	0	0	6
1910.....	1	0	2	1	1	4	6	3	9	1	0	0	28	1910.....	0	0	0	1	0	0	1	1	1	1	0	0	0	4
1911.....	1	0	1	3	6	8	6	8	9	1	0	0	43	1911.....	0	0	0	0	0	1	3	0	0	0	0	0	0	12
1912.....	0	0	2	8	4	7	13	9	7	2	0	0	52	1912.....	0	0	0	2	3	1	3	1	0	0	2	0	0	5
1913.....	2	0	5	2	6	6	13	5	3	2	0	0	44	1913.....	0	0	0	1	1	2	0	1	0	0	0	0	0	1
1904-1913....	8	5	25	33	55	85	94	69	45	11	0	1	431	1904-1913....	1	3	2	4	13	5	9	8	4	3	2	0	54	
1886-1913....	11	11	42	75	146	223	238	166	87	22	5	4	1,030	1872-1913....	2	4	4	8	31	22	18	26	11	5	2	2	135	
Port Crescent, Clallam County, Wash.														Pueblo, Pueblo County, Colo.														
[Lat., 48° 08' N.; long., 123° 41' W. Elevation, 259 feet.]														[Lat., 38° 18' N.; long., 104° 36' W. Elevation, 4,685 feet.]														
1899-1903....	0	0	0	0	0	1	2	0	1	0	0	0	4	1889-1903....	0	0	1	21	76	117	155	145	27	7	1	0	550	
1904.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1904.....	0	0	0	1	11	15	14	17	5	0	0	0	63	
1905.....	0	0	0	0	2	1	2	0	0	0	0	1	6	1905.....	0	0	2	1	10	14	14	12	5	0	0	0	58	
1906.....	0	0	0	0	0	0	0	0	0	0	0	0	2	1906.....	0	0	0	4	6	12	17	8	7	0	0	0	54	
1907.....	0	0	0	0	0	0	1	0	0	0	0	0	1	1907.....	0	0	1	0	1	10	6	16	13	5	1	0	53	
1908.....	0	0	0	0	0	0	1	2	0	0	0	0	4	1908.....	0	1	1	3	4	6	18	8	1	1	0	0	43	
1909.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1909.....	0	0	1	0	3	15	10	10	8	3	0	0	48	
1910.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1910.....	0	0	1	5	5	8	14	13	2	0	0	0	48	
1911.....	0	0	0	0	0	0	0	2	1	0	0	0	3	1911.....	0	0	0	4	7	4	15	6	4	0	0	0	40	
1912.....	0	0	0	0	0	4	0	1	0	0	0	1	2	1912.....	0	0	0	3	2	9	12	10	3	1	0	0	40	
1913.....	0	0	0	0	0	0	0	0	0	0	0	0	0	1913.....	0	0	1	0	7	8	8	8	4	0	0	0	37	
1904-1913....	0	0	0	0	2	5	6	5	1	0	1	4	24	1904-1913....	0	2	6	22	65	97	138	105	48	6	0	1	484	
1889-1913....	0	0	0	0	2	6	8	5	2	0	1	4	28	1889-1913....	0	2	7	43	141	214	293	250	69	13	1	1	1,034	
Port Huron, St. Clair County, Mich.															Raleigh, Wake County, N. C.													
[Lat., 43° 00' N.; long., 82° 26' W. Elevation, 638 feet.]															[Lat., 35° 45' N.; long., 78° 37' W. Elevation, 376 feet.]													
1875-1903....	3	6	17	31	94	126	130	91	53	24	3	1	579	1887-1903....	0	12	33	34	109	125	138	112	35	8	6	1	613	
1904.....	0	2	3	1	2	4	5	6	6	2	0	0	31	1904.....	1	2	4	2	9	11	11	7	3	0	0	0	50	
1905.....	0	0	0	0	5	6	8	7	3	1	1	0	31	1905.....	0	0	3	3	8	12	11	4	0	0	1	0	47	
1906.....	0	1	0	3	6	9	8	9	1	2	0	0	39	1906.....	0	1	0	2	3	5	12	14	4	0	1	0	51	
1907.....	2	0	2	2	2	6	5	3	6	4	0	0	33	1907.....	0	0	1	0	1	6	11	5	1	1	1	0	42	
1908.....	0	0	2	2	5	8	4	5	0	1	2	0	29	1908.....	0	0	3	4	7	13	7	2	0	1	1	0	41	
1909.....	1	0	0	5	3	6	6	5	2	0	1	0	29	1909.....	0	0	1	4	4	12	11	4	3	1	0	0	44	
1910.....	0	0	1	4	2	7	7	2	2	0	0	0	27	1910.....	1	1	5	6	8	15	10	7	1	1	0	0	56	
1911.....	0	1	0	0	9	5	5	8	5	3	0	0	36	1911.....	0	1	2	3	3	10	13	11	4	1	0	0	48	
1912.....	0	0	0	4	8	5	6	4	3	2	0	0	32	1912.....	0	1	1	3	7	8	9	6	1	0	0	0	45	
1913.....	0	1	2	5	4	7	8	3	2	0	1	0	38	1913.....	1	0	8	2	5	10	12	9	1	2	0	0	45	
1904-1913....	3	5	11	28	46	58	62	62	30	17	5	0	325	1904-1913....	3	6	20	30	59	90	119	87	40	9	5	1	469	
1875-1913....	6	11	23	57	140	184	192	153	83	41	8	1	904	1887-1913....	3	18	53	64	168	215	257	199	75	17	11	2	1,082	
Portland, Cumberland County, Me.															Rapid City, Pennington County, S. Dak.													
[Lat., 43° 39' N.; long., 70° 15' W. Elevation, 103 feet.]															[Lat., 44° 04' N.; long., 103° 12' W. Elevation, 3,234 feet.]													
1871-1903....	0	2	5	13	32	68	87	59	33	11	3	1	314	1888-1903....	0	0	2	24	66	148	139	110	30	8	0	0	527	
1904.....	1	0	1	1	2	3	2	2	3	0	0	0	15	1904.....	0	0	0	0	3	9	9	10	1	0	0	0	32	
1905.....	0	0	0	0	2	1	3	1	0	0	0	0	7	1905.....	0	0	0	1	6	1	11	2	0	0	0	0	24	
1906.....	0	0	0	1	2	6	7	3	1	2	0	0	22	1906.....	0	0	0	0	0	7	8	6	0	0	0	0	27	
1907.....	0																											

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Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Red Bluff, Tehama County, Cal.																											
[Lat., 40° 10' N.; long., 122° 15' W. Elevation, 332 feet.]																											
1882-1903....	2	7	9	9	20	13	6	4	11	9	2	3	95	1871-1903....	11	26	65	98	167	201	137	125	75	41	24	11	981
1904.....	0	0	1	0	1	2	2	0	0	1	0	0	7	1904.....	0	2	8	4	7	7	12	7	8	1	0	0	56
1905.....	0	0	2	0	2	2	0	0	0	0	0	0	6	1905.....	0	0	3	6	7	6	10	9	4	2	0	0	47
1906.....	0	1	0	0	0	0	1	0	1	0	0	1	5	1906.....	1	2	1	5	8	7	10	4	0	0	1	0	46
1907.....	0	0	0	0	0	4	0	0	0	1	0	0	5	1907.....	0	0	6	4	6	11	8	9	4	3	1	0	52
1908.....	0	0	0	0	2	0	0	0	0	0	0	0	2	1908.....	0	1	3	5	14	9	9	5	3	0	1	0	50
1909.....	1	1	2	1	1	1	0	0	0	0	0	0	7	1909.....	1	3	5	7	10	10	9	3	5	4	0	0	62
1910.....	1	0	0	0	2	0	0	0	0	0	0	0	3	1910.....	0	0	1	6	7	11	9	10	8	0	1	0	53
1911.....	0	0	0	0	2	0	0	0	1	2	0	0	5	1911.....	1	2	3	8	4	7	2	8	11	3	2	0	51
1912.....	1	0	1	2	3	1	1	0	0	1	0	0	10	1912.....	0	1	1	6	8	11	11	12	5	5	1	0	61
1913.....	1	0	0	0	1	0	0	1	0	0	0	0	3	1913.....	1	1	5	2	3	9	8	8	5	3	3	0	48
1904-1913....	4	2	5	4	13	9	4	1	4	5	0	1	52	1904-1913....	4	12	36	53	69	88	86	87	55	22	14	0	526
1882-1913....	6	9	14	13	33	22	10	5	15	14	2	4	147	1871-1913....	15	38	101	151	236	280	222	212	130	63	38	11	1,507
Richmond, Henrico County, Va.																											
[Lat., 37° 32' N.; long., 77° 27' W. Elevation, 144 feet.]																											
1888-1903....	1	2	11	7	36	34	48	38	17	2	2	0	198	1889-1903....	0	0	11	37	71	104	90	95	52	27	1	0	488
1904.....	0	0	3	2	6	10	11	10	2	0	0	0	44	1904.....	0	0	0	0	5	8	4	4	3	2	0	0	26
1905.....	0	0	3	5	10	5	13	9	4	0	0	0	49	1905.....	0	0	1	7	12	3	10	3	0	0	0	0	37
1906.....	0	0	0	5	12	10	15	2	0	0	0	0	49	1906.....	0	0	0	2	10	5	9	5	6	0	0	0	37
1907.....	0	0	2	2	7	6	8	3	1	0	0	0	41	1907.....	0	0	0	1	0	2	9	7	5	4	1	0	29
1908.....	0	0	0	4	6	4	12	6	1	1	0	0	31	1908.....	0	0	0	1	1	5	5	2	5	0	0	0	29
1909.....	1	1	1	4	3	11	3	4	2	1	1	0	35	1909.....	0	0	0	0	2	2	8	10	7	2	0	0	33
1910.....	0	0	0	6	4	5	6	7	3	2	0	0	33	1910.....	0	0	0	0	1	3	3	1	0	0	0	0	15
1911.....	0	0	5	6	10	7	12	4	1	1	0	0	49	1911.....	0	0	0	0	6	11	10	11	10	2	0	0	50
1912.....	0	0	3	4	2	7	8	7	3	0	1	0	35	1912.....	0	0	0	4	7	2	9	2	0	0	0	0	31
1913.....	0	0	3	2	6	9	15	7	3	1	0	0	46	1913.....	0	0	2	2	4	7	13	6	4	2	1	0	41
1904-1913....	1	1	17	39	54	62	93	86	32	7	3	0	415	1904-1913....	0	0	4	13	50	72	63	68	47	10	1	0	328
1888-1913....	2	3	28	46	90	116	141	124	49	9	5	0	613	1889-1913....	0	0	15	50	121	176	153	163	99	37	2	0	816
Roseburg, Douglas County, Oreg.																											
[Lat., 43° 13' N.; long., 123° 20' W. Elevation, 510 feet.]																											
1878-1903....	0	0	3	7	21	10	6	11	5	4	1	0	68	1874-1903....	3	5	11	22	58	55	88	93	32	19	5	3	397
1904.....	0	0	0	0	0	0	1	0	0	0	0	0	1	1904.....	1	0	5	0	4	5	7	8	4	2	0	0	36
1905.....	0	0	0	1	1	0	0	0	0	0	1	0	3	1905.....	0	0	6	5	2	2	11	7	0	1	0	0	44
1906.....	0	0	0	0	0	0	0	1	0	0	0	0	1	1906.....	2	0	2	3	2	5	12	12	3	0	0	0	41
1907.....	0	0	2	0	1	1	0	0	0	0	0	0	4	1907.....	1	2	1	6	6	8	9	9	3	5	0	0	50
1908.....	0	0	0	0	0	0	0	1	0	0	0	0	1	1908.....	0	0	0	3	2	7	10	10	5	0	0	0	33
1909.....	0	0	1	1	0	0	1	0	0	0	0	0	1	1909.....	3	1	1	1	3	7	7	15	5	2	0	0	45
1910.....	0	0	1	1	2	1	0	0	2	0	0	0	2	1910.....	6	0	0	1	1	2	6	6	3	0	0	0	20
1911.....	0	0	0	0	0	1	1	0	2	0	0	0	4	1911.....	2	0	1	2	2	1	1	4	4	0	0	0	17
1912.....	0	0	0	0	1	3	3	2	0	0	0	0	9	1912.....	0	0	0	1	2	8	5	6	2	2	0	0	27
1913.....	0	0	0	0	0	1	0	1	1	1	0	0	4	1913.....	1	0	0	1	3	11	12	7	6	2	0	0	43
1904-1913....	0	0	3	2	5	6	7	4	6	1	0	1	35	1904-1913....	10	3	17	23	29	57	75	89	42	13	1	0	356
1878-1913....	0	0	6	9	26	16	13	15	11	5	1	1	103	1874-1913....	13	8	28	45	87	115	160	182	74	32	6	3	753
Sacramento, Sacramento County, Cal.																											
[Lat., 38° 33' N.; long., 121° 30' W. Elevation, 69 feet.]																											
1878-1903....	2	3	8	10	15	5	2	8	11	2	3	3	72	1885-1903 ¹⁹	13	15	28	62	86	64	71	62	48	23	18	7	497
1904.....	0	0	2	0	0	0	0	1	5	3	0	0	11	1904.....	0	0	2	3	9	5	5	5	8	2	0	1	40
1905.....	0	1	0	0	1	0	0	1	0	0	0	0	3	1905.....	0	0	5	7	5	4	7	5	5	2	2	1	44
1906.....	0	1	3	0	0	1	0	0	1	0	0	0	6	1906.....	1	1	2	7	6	5	7	8	3	2	0	3	46
1907.....	0	0	2	0	1	1	0	0	0	1	0	0	6	1907.....	0	1	4	9	6	5	1	5	4	3	1	41	
1908.....	0	0	1	0	0	0	0	0	1	0	0	0	2	1908.....	0	3	3	7	3	14	9	9	5	4	2	2	57
1909.....	0	0	1	0	0	0	0	0	0	0	0	0	1	1909.....	0	1	5	12	5	4	3	4	4	2	1	1	46
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Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
San Diego, San Diego County, Cal.																												
[Lat., 32° 43' N.; long., 117° 10' W. Elevation, 59 feet.]																												
1872-1903....	2	6	9	5	3	1	3	9	2	3	0	1	44	1872-1903....	2	3	13	35	82	108	237	194	63	25	6	2	759	
1904....	0	0	0	0	2	0	0	0	0	0	0	0	2	1904....	0	0	1	0	6	12	16	17	12	1	0	0	65	
1905....	0	1	2	0	0	0	0	0	1	0	1	0	5	1905....	0	1	2	1	6	8	18	17	10	1	1	0	65	
1906....	0	0	0	1	0	0	0	1	0	0	0	1	3	1906....	0	0	2	3	5	6	24	17	11	3	0	0	77	
1907....	0	0	0	0	0	0	0	0	0	1	0	0	1	1907....	0	1	1	2	11	7	25	17	8	2	0	0	74	
1908....	1	0	0	0	0	0	1	1	1	2	0	0	6	1908....	0	1	2	5	6	6	31	18	5	1	0	0	75	
1909....	1	0	1	0	0	0	0	0	0	0	0	0	2	1909....	2	0	2	1	5	9	19	22	5	6	0	0	71	
1910....	0	0	0	0	0	0	0	1	1	0	0	0	2	1910....	1	0	4	3	5	11	20	19	10	2	1	0	76	
1911....	0	0	0	0	0	0	3	0	0	0	0	2	5	1911....	0	0	2	3	13	12	22	13	11	1	0	0	77	
1912....	0	0	1	0	0	2	0	0	0	2	1	0	0	1912....	0	1	5	4	6	19	21	17	4	1	0	0	78	
1913....	0	0	0	0	0	0	0	3	0	0	0	0	3	1913....	0	0	1	4	7	19	14	19	8	1	1	0	74	
1904-1913....	2	1	4	1	2	2	4	6	3	5	2	3	35	1904-1913....	3	6	23	28	71	109	210	176	84	19	3	0	732	
1872-1913....	4	7	13	6	5	3	7	15	5	8	2	4	79	1872-1913....	4	9	36	63	153	217	437	370	147	44	9	2	1,491	
San Juan, P. R.																												
[Lat., 18° 29' N.; long., 66° 07' W. Elevation, 82 feet.]																												
1899-1903....	1	0	0	12	35	41	40	39	47	47	15	7	284	1888-1903....	0	0	6	11	40	41	21	S4	68	64	20	3	0	337
1904....	0	1	2	4	3	3	8	8	6	1	4	0	40	1904....	0	0	2	1	1	3	6	5	1	0	1	0	20	
1905....	0	0	0	3	6	8	8	10	11	12	3	2	56	1905....	0	0	1	1	2	2	3	2	1	0	0	0	16	
1906....	0	9	0	1	3	11	7	7	5	1	1	1	37	1906....	0	0	0	0	1	3	2	3	4	0	0	0	18	
1907....	0	0	0	1	4	9	6	7	11	12	1	0	51	1907....	0	0	0	2	0	2	3	5	3	0	0	0	17	
1908....	0	1	1	0	4	9	9	6	10	5	5	0	50	1908....	0	0	1	2	1	4	5	5	2	4	0	0	23	
1909....	1	0	0	0	3	5	5	3	11	8	4	0	38	1909....	0	0	0	0	1	2	4	2	1	1	0	0	13	
1910....	1	0	0	0	4	3	6	8	7	5	1	0	35	1910....	0	0	1	1	0	1	5	6	5	5	3	0	27	
1911....	0	0	0	3	11	4	9	5	12	12	6	4	46	1911....	0	0	1	0	6	3	3	3	1	1	0	0	22	
1912....	0	0	0	2	5	4	3	7	15	S	1	1	46	1912....	0	0	0	1	0	3	2	5	8	2	0	0	27	
1913....	0	0	1	0	4	7	6	7	10	16	2	0	53	1913....	0	0	1	2	2	4	7	6	2	2	0	0	26	
1904-1913....	2	2	4	12	44	61	65	78	95	76	27	8	472	1904-1913....	0	0	9	9	18	34	39	40	31	22	7	0	209	
1899-1913....	3	2	4	24	79	102	105	115	142	123	42	15	756	1899-1913....	0	0	15	20	58	75	123	108	95	42	10	0	546	
Sandusky, Erie County, Ohio.																												
[Lat., 41° 25' N.; long., 82° 40' W. Elevation, 629 feet.]																												
1884-1903....	5	7	17	35	91	134	131	85	52	18	3	4	582	1876-1903....	15	22	53	72	142	214	282	273	77	11	9	9	1,179	
1904....	1	3	2	1	3	3	8	5	3	1	0	0	30	1904....	1	1	5	2	3	11	17	19	5	1	0	0	65	
1905....	0	0	0	3	8	9	10	5	3	1	0	0	39	1905....	0	2	7	12	6	18	9	8	2	1	0	1	65	
1906....	1	0	0	2	6	9	9	12	2	2	0	0	43	1906....	1	0	3	2	7	15	17	11	9	1	0	1	67	
1907....	1	0	3	2	3	8	9	3	6	2	0	1	38	1907....	0	1	1	4	9	11	19	21	8	1	1	1	77	
1908....	0	0	5	3	11	7	10	6	3	0	1	0	46	1908....	2	2	5	10	8	12	13	5	1	0	0	59		
1909....	2	0	1	4	9	11	7	6	1	0	3	0	44	1909....	1	2	3	2	8	11	11	10	1	1	1	0	51	
1910....	0	0	1	2	4	3	6	5	6	1	1	0	29	1910....	0	5	1	4	6	11	17	6	6	0	0	0	56	
1911....	0	0	1	0	8	6	4	6	7	4	0	0	36	1911....	0	0	0	1	1	2	15	11	10	2	0	0	51	
1912....	0	0	3	4	8	8	12	11	4	2	0	0	48	1912....	0	2	0	7	5	9	12	14	1	0	0	57		
1913....	2	0	2	5	10	10	8	5	3	0	0	0	47	1913....	1	2	2	3	5	8	21	11	3	0	1	1	58	
1904-1913....	7	3	18	23	61	74	85	87	40	16	5	1	400	1904-1913....	6	17	18	37	69	101	152	122	69	8	3	4	608	
1884-1913....	12	10	35	58	152	208	216	152	92	34	8	5	982	1876-1913....	21	39	71	109	211	315	434	395	146	19	12	13	1,785	
San Francisco, San Francisco County, Cal.																												
[Lat., 37° 48' N.; long., 122° 26' W. Elevation, 155 feet.]																												
1891-1903....	2	1	1	3	1	1	1	2	2	2	3	5	24	1893-1903....	0	1	1	5	5	8	7	5	4	1	2	0	39	
1904....	0	0	0	0	0	0	0	0	0	0	0	0	0	1904....	0	2	1	0	0	1	1	0	0	0	0	0	5	
1905....	0	0	0	0	0	0	0	0	0	0	0	0	0	1905....	0	0	1	0	0	1	0	1	0	0	0	0	3	
1906....	0	0	0	0	0	0	0	0	0	0	0	0	0	1906....	0	0	0	1	0	0	4	1	0	0	0	0	7	
1907....	0	0	0	0	0	0	0	0	0	0	1	0	1	1907....	0	0	0	0	0	1	2	1	1	0	0	0	6	
1908....	0	1	0	0	0	0	0	0	0	0	0	0	1	1908....	0	0	0	2	0	1	1	2	0	0	0	0	8	
1909....	0	1	0	0	0	0	0	0	0	0	0	0	1	1909....	0	0	0	1	1	0	0							

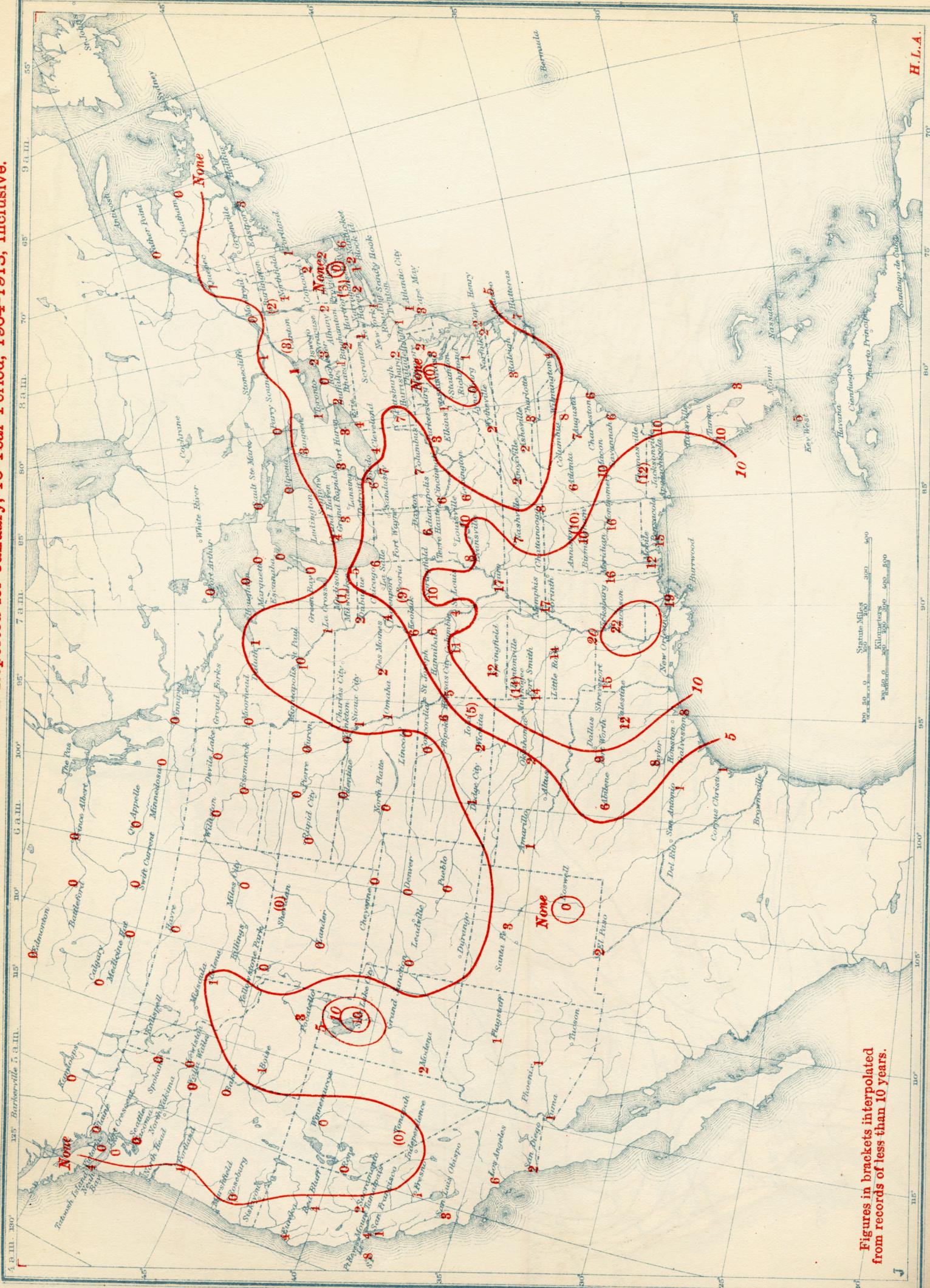
Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1915, inclusive—Contd.

Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
Sioux City, Woodbury County, Iowa.																												
[Lat., 42° 29' N.; long., 96° 24' W. Elevation, 1,135 feet.]																												
1890-1903....	0	0	13	45	74	109	99	90	63	25	1	0	509	1890-1903 ²⁴	14	20	30	34	35	59	150	164	191	79	12	5	6	765
1904.....	0	0	1	1	4	9	4	5	2	2	0	0	28	1904.....	3	3	9	5	5	20	31	26	17	3	1	0	0	123
1905.....	0	0	1	2	9	10	6	10	4	1	2	0	45	1905.....	0	0	6	4	19	17	27	23	15	3	0	0	0	114
1906.....	0	0	0	3	7	7	10	8	7	1	1	0	44	1906.....	2	0	1	2	12	18	27	19	11	2	0	0	0	94
1907.....	1	0	0	0	7	9	15	9	6	4	0	0	51	1907.....	0	2	0	1	11	11	22	23	20	2	1	2	1	95
1908.....	0	0	1	3	11	11	5	7	2	0	0	0	49	1908.....	1	1	0	4	6	16	13	22	9	1	0	0	0	73
1909.....	0	1	0	3	5	14	6	11	4	3	2	0	49	1909.....	2	3	0	3	10	18	16	17	7	0	0	0	1	77
1910.....	0	0	0	3	1	6	9	9	8	2	0	0	48	1910.....	1	2	3	5	18	24	23	9	7	0	0	0	0	94
1911.....	0	0	0	3	3	12	12	9	6	3	0	0	48	1911.....	0	0	1	8	14	21	17	5	2	1	0	0	1	91
1912.....	0	0	0	1	4	8	5	11	10	6	1	0	47	1912.....	1	4	5	13	19	26	22	17	15	4	2	0	1	101
1913.....	0	0	1	5	10	6	10	10	4	0	0	0	46	1913.....	0	1	1	0	8	13	26	19	11	2	0	0	1	82
1904-1913....	1	1	5	27	65	89	88	88	49	17	6	0	436	1904-1913....	10	13	24	28	97	164	229	210	131	29	4	5	5	844
1890-1913....	1	1	18	72	139	198	187	178	102	42	7	0	945	1890-1913....	24	33	54	63	156	314	393	401	210	41	9	11	1	1,709
Spokane, Spokane County, Wash.																												
[Lat., 47° 40' N.; long., 117° 25' W. Elevation, 1,939 feet.]																												
1890-1903....	0	0	2	4	16	21	23	13	8	1	0	0	88	1890-1903 ²⁵	0	0	0	0	1	3	1	3	6	7	10	10	(41)	
1904.....	0	0	0	2	0	2	2	1	0	0	0	0	7	1904.....	0	3	1	0	0	0	0	0	0	0	1	0	0	5
1905.....	0	0	0	0	3	4	5	2	1	1	0	0	16	1905.....	1	0	0	0	1	0	1	0	2	2	1	1	0	8
1906.....	0	0	0	0	3	1	4	1	0	0	0	0	9	1906.....	2	0	0	0	0	0	2	0	0	0	0	1	0	3
1907.....	0	0	0	0	2	4	0	4	3	1	0	0	14	1907.....	0	0	0	0	0	0	2	0	0	0	0	1	0	3
1908.....	0	0	0	0	2	1	3	2	1	1	0	0	11	1908.....	0	0	0	0	0	0	0	1	0	0	1	2	1	1
1909.....	0	0	0	0	0	0	3	2	0	2	0	0	7	1909.....	0	0	0	0	0	0	0	0	1	0	0	0	0	4
1910.....	0	0	0	0	1	1	1	1	2	1	0	0	9	1910.....	0	0	0	0	0	0	0	0	0	1	0	0	0	3
1911.....	0	0	0	0	0	0	6	1	5	2	0	0	14	1911.....	0	0	0	0	0	0	0	0	1	1	4	10	10	
1912.....	0	0	0	2	1	3	3	0	0	0	0	0	9	1912.....	0	0	0	0	0	0	0	0	1	1	1	4	10	
1913.....	0	0	0	0	0	2	4	4	2	5	1	0	14	1913.....	1	0	0	0	0	0	0	0	0	1	2	2	10	
1904-1913....	0	0	0	8	15	27	26	19	10	3	0	0	108	1904-1913....	4	3	1	1	1	2	5	3	10	7	8	8	53	
1890-1913....	0	0	2	12	31	48	49	32	18	4	0	0	196	1890-1913....	4	3	1	1	2	5	6	6	16	14	18	18	94	
Springfield, Sangamon County, Ill.																												
[Lat., 39° 48' N.; long., 89° 39' W. Elevation, 644 feet.]																												
1880-1903....	3	13	45	101	182	218	145	140	95	43	23	8	1,016	1871-1903....	2	7	32	57	139	194	170	111	72	32	10	6	832	
1904.....	0	1	6	4	4	9	8	5	4	1	0	0	42	1904.....	0	2	3	1	3	5	6	7	0	0	0	0	33	
1905.....	0	0	4	6	7	6	6	3	3	0	0	0	42	1905.....	0	0	1	2	6	5	10	4	2	0	1	0	31	
1906.....	1	0	0	5	9	6	7	10	4	1	1	1	45	1906.....	0	1	0	2	5	9	10	10	3	2	0	0	42	
1907.....	3	0	8	5	8	9	14	10	2	0	1	1	62	1907.....	2	0	4	3	2	11	8	2	7	3	0	1	43	
1908.....	0	1	4	15	10	7	5	1	0	2	0	0	52	1908.....	0	0	4	3	11	6	8	8	0	0	1	0	41	
1909.....	2	3	2	6	6	11	6	4	1	4	4	0	52	1909.....	1	0	5	8	10	9	7	3	0	4	0	0	47	
1910.....	0	0	3	4	8	11	12	5	7	3	2	0	55	1910.....	0	0	0	6	4	4	7	3	4	2	1	0	31	
1911.....	1	1	4	6	5	8	6	5	12	2	3	0	54	1911.....	0	1	0	1	6	6	7	6	8	0	0	0	41	
1912.....	2	0	2	8	11	12	11	8	4	4	1	0	63	1912.....	0	0	0	4	6	13	10	2	2	2	0	0	46	
1913.....	1	0	5	3	5	6	10	3	1	3	0	0	42	1913.....	3	0	2	4	3	10	14	7	4	1	0	0	48	
1904-1913....	10	6	38	54	79	87	84	68	44	21	16	2	509	1904-1913....	6	4	14	31	54	73	91	64	38	18	8	1	403	
1880-1913....	13	19	83	155	261	305	208	139	64	39	10	0	1,525	1871-1913....	8	11	46	88	193	267	261	175	110	50	19	7	1,235	
Springfield, Greene County, Mo.																												
[Lat., 37° 12' N.; long., 93° 18' W. Elevation, 1,324 feet.]																												
1888-1903....	10	21	60	105	146	153	145	136	67	41	29	16	930	1888-1903....	2	4	31	58	106	100	91	99	51	26	4	4	575	
1904.....	1	2	8	6	8	13	14	7	3	1	0	1	64	1904.....	0	0	2	4	4	10	14	8	6	5	9	0	62	
1905.....	0	0	2	4	12	8	10	10	8	4	2	0	60	1905.....	0	0	4	2	9	7	9	6	8	1	1	0	47	
1906.....	1	1	3	5	10	11	11	11	7	1	1	0	62	1906.....	1	0	0	3	4	6	8	11	5	0	1	0	50	
1907.....	3	1	2	6	10	13	5	5	4	1	0	0	52	1907.....	2	3	6	2	5	9	9	10	8	3	0	1	58	
1908.....	0	3	3	6	9	12	5	9	2	0	4	0	53															

Table of numbers of thunderstorms recorded at Weather Bureau stations, by months and years, from the beginning of observations to 1913, inclusive—Concl'd.

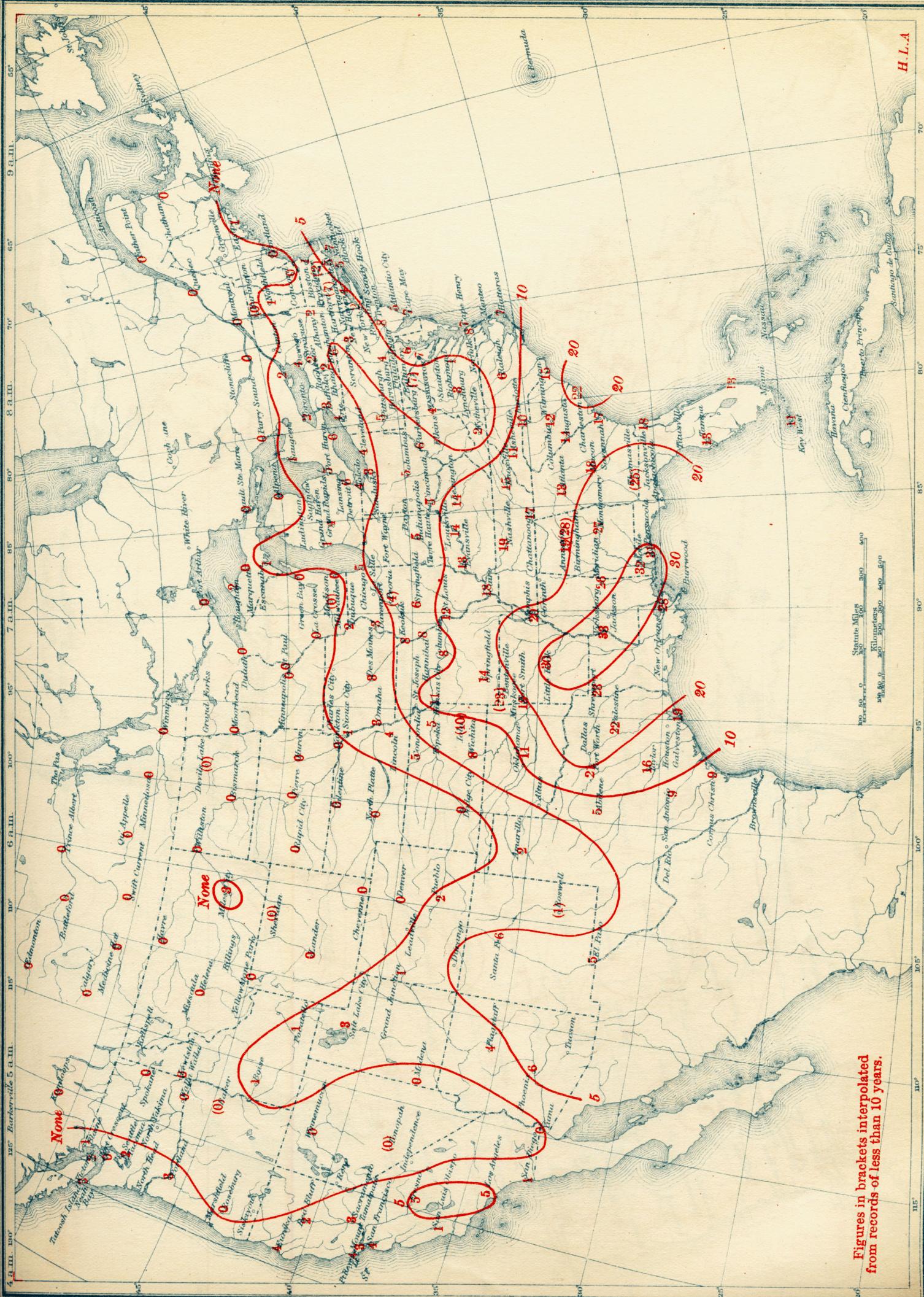
Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year.	
Vicksburg, Warren County, Miss.																											
[Lat., 32° 22' N.; long., 90° 53' W. Elevation, 247 feet.]																											
1885-1903....	35	50	78	76	96	161	190	135	55	18	24	19	937	1883-1903....	0	0	0	18	47	114	117	86	19	5	0	0	406
1904.....	1	1	8	3	8	10	18	17	4	0	0	1	60	1904.....	0	0	0	2	3	7	5	3	2	0	0	0	22
1905.....	2	1	4	3	7	11	6	7	1	0	0	0	54	1905.....	0	0	0	0	2	6	7	9	2	0	0	0	28
1906.....	2	1	5	3	5	8	9	12	11	0	2	0	58	1906.....	0	0	0	0	1	0	0	0	1	0	0	0
1907.....	2	4	1	9	11	8	8	9	4	2	1	2	61	1907.....	0	0	0	0	2	5	5	5	3	1	0	0	18
1908.....	1	4	1	9	6	13	12	11	1	3	1	0	69	1908.....	0	0	0	1	4	7	4	5	2	0	0	0	23
1909.....	1	8	6	8	12	12	8	6	6	1	1	0	89	1909.....	0	0	0	0	2	5	4	1	3	0	0	0	15
1910.....	1	4	2	6	6	12	10	9	8	4	3	2	62	1910.....	0	0	0	1	1	7	6	7	4	0	0	0	17
1911.....	0	2	2	11	5	11	12	5	6	1	2	3	60	1911.....	0	0	0	0	1	3	7	6	4	1	0	0	29
1912.....	3	3	6	9	7	13	18	14	4	1	2	2	82	1912.....	0	0	0	0	2	6	6	7	2	1	0	0	27
1913.....	9	5	6	4	9	11	12	11	11	1	1	0	80	1913.....	0	0	0	0	3	10	5	7	1	0	0	0	26
1904-1913....	22	33	41	70	76	109	111	101	68	12	14	11	668	1904-1913....	0	0	1	5	23	60	49	53	18	2	0	0	211
1885-1913....	57	83	119	146	172	270	301	236	123	30	38	30	1,605	1883-1913....	0	0	1	23	70	174	163	139	37	7	0	0	617
Walla Walla, Walla Walla County, Wash.																											
[Lat., 46° 2' N.; long., 118° 20' W. Elevation, 1,000 feet.]																											
1888-1903....	0	0	2	3	17	21	25	15	7	1	0	0	91	1871-1903....	16	21	50	92	145	204	263	198	61	44	12	10	1,128
1904.....	0	0	0	2	0	3	5	1	1	0	0	0	12	1904.....	1	2	9	5	4	13	19	15	4	0	0	0	72
1905.....	0	0	0	3	4	2	1	0	0	0	0	0	10	1905.....	0	1	1	5	8	2	15	7	2	0	0	0	48
1906.....	0	0	0	0	3	1	6	4	0	0	0	0	14	1906.....	0	3	1	4	8	12	13	14	3	2	1	0	63
1907.....	0	0	0	0	2	b 0	2	1	0	0	0	0	a 5	1907.....	0	1	2	3	5	10	14	10	5	1	0	0	51
1908.....	0	0	0	0	0	0	2	2	1	0	0	0	5	1908.....	0	0	4	6	9	9	8	12	3	0	0	0	54
1909.....	0	0	1	0	0	2	0	1	0	1	0	0	5	1909.....	0	3	1	2	5	10	7	7	0	3	2	0	40
1910.....	0	0	0	0	0	0	1	1	3	0	0	0	10	1910.....	1	2	1	3	8	10	14	10	8	0	0	0	57
1911.....	0	0	0	0	3	4	0	1	2	0	0	0	10	1911.....	0	0	2	1	1	12	6	10	7	0	0	0	39
1912.....	0	0	1	1	3	1	1	0	0	0	0	0	7	1912.....	1	2	0	3	8	10	5	0	0	0	0	0	37
1913.....	0	0	1	2	7	1	4	0	0	0	0	0	15	1913.....	1	1	2	0	3	9	13	13	4	0	0	0	50
1904-1913....	0	0	1	4	14	24	18	17	9	1	0	0	88	1904-1913....	4	15	23	32	57	89	117	108	46	15	4	1	511
1888-1913....	0	0	3	7	31	45	43	32	16	2	0	0	179	1871-1913....	20	39	S2	124	202	293	380	306	107	59	16	11	1,639
Washington, D. C.																											
[Lat., 38° 54' N.; long., 77° 3' W. Elevation, 112 feet.]																											
1872-1903 ²²	3	9	27	52	143	173	214	139	57	14	8	1	840	1885-1903....	0	1	4	7	36	38	39	38	14	5	1	1	184
1904.....	0	0	0	2	3	10	14	6	4	1	0	0	40	1904.....	0	0	2	0	2	7	5	3	1	0	0	0	20
1905.....	0	0	1	4	8	9	11	10	1	0	0	0	44	1905.....	0	0	1	1	4	2	1	4	0	0	0	0	13
1906.....	0	1	1	4	5	9	11	11	4	0	0	0	46	1906.....	0	0	1	1	1	1	4	5	0	0	0	0	13
1907.....	0	0	3	3	4	3	9	6	8	2	1	1	39	1907.....	0	0	0	2	2	6	2	1	2	0	0	0	17
1908.....	2	0	1	1	6	4	11	4	2	0	0	0	31	1908.....	0	0	0	1	2	5	5	2	0	1	0	0	18
1909.....	0	1	1	5	2	3	8	5	1	1	1	0	33	1909.....	0	0	0	0	1	6	2	2	0	0	0	0	6
1910.....	0	1	2	7	5	6	6	2	4	1	1	0	36	1910.....	0	0	1	1	0	2	1	0	0	0	0	0	4
1911.....	0	2	5	0	5	8	8	12	4	0	0	0	44	1911.....	0	0	0	2	3	8	2	1	0	0	0	0	16
1912.....	0	2	1	6	5	8	10	3	6	0	0	0	41	1912.....	0	0	0	0	2	3	2	1	1	0	0	0	11
1913.....	1	0	2	2	5	6	9	8	3	2	0	0	38	1913.....	0	0	1	0	3	7	7	1	0	0	0	0	26
1904-1913....	3	7	17	33	48	72	97	67	37	7	3	1	392	1904-1913....	0	0	6	6	17	33	33	28	14	4	1	0	142
1872-1913....	6	16	44	85	191	245	311	206	94	21	11	2	1,232	1885-1913....	0	1	10	13	53	71	72	66	28	9	2	1	326
Wichita, Sedgwick County, Kans.																											
[Lat., 37° 41' N.; long., 97° 20' W. Elevation, 1,358 feet.]																											
1888-1903 ²²	2	8	35	77	134	127	131	126	79	43	4	3	769	1885-1903....	0	1	4	7	36	38	39	38	14	5	1	1	184
1904.....	0	0	4	6	14	14	14	7	5	2	0	0	66	1904.....	0	0	2	3	7	5	3	1	0	0	0	0	20
1905.....	0	0	5	4	14	8	6	7	8	2	1	0	55	1905.....	0	0	0	1	4	2	2	0	0	0	0	0	13
1906.....	0	0	3	6	10	10	13	11	8	2	0	0	63	1906.....	0	0	1	1	1	1	4	5	0	0	0	0	13
1907.....	1	2	1	2	7	10	7	7	8	3	0	0	48	1907.....	0	0	0	0	2	5	5	2	0	0	0	0	17
1908.....	0	0	0	3	10	14	8	9	5	2	2	0	53	1908.....	0	0	1	1	2	5	5	2	0	0	0	0	18
1909.....	0	2	4	7	6	14	11	6	2	3	4	1															

W. W. H. A. Fig. 1. Total Number of Thunderstorms Reported for January, 10-Year Period, 1904-1913, Inclusive.



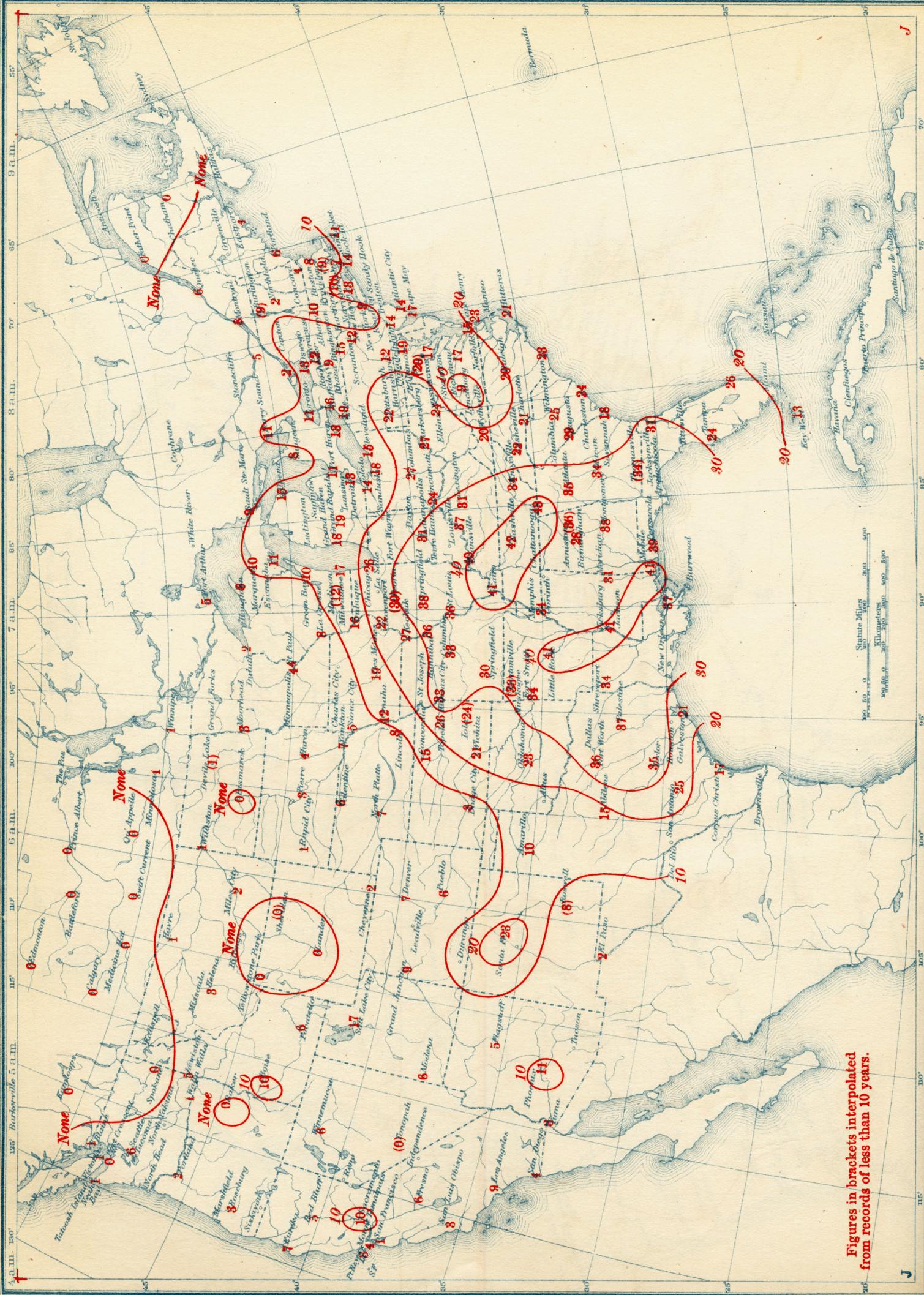
Figures in brackets interpolated from records of less than 10 years.

W. H. A. Fig. 2. Total Number of Thunderstorms Reported for February, 10-Year Period, 1904-1913, Inclusive.



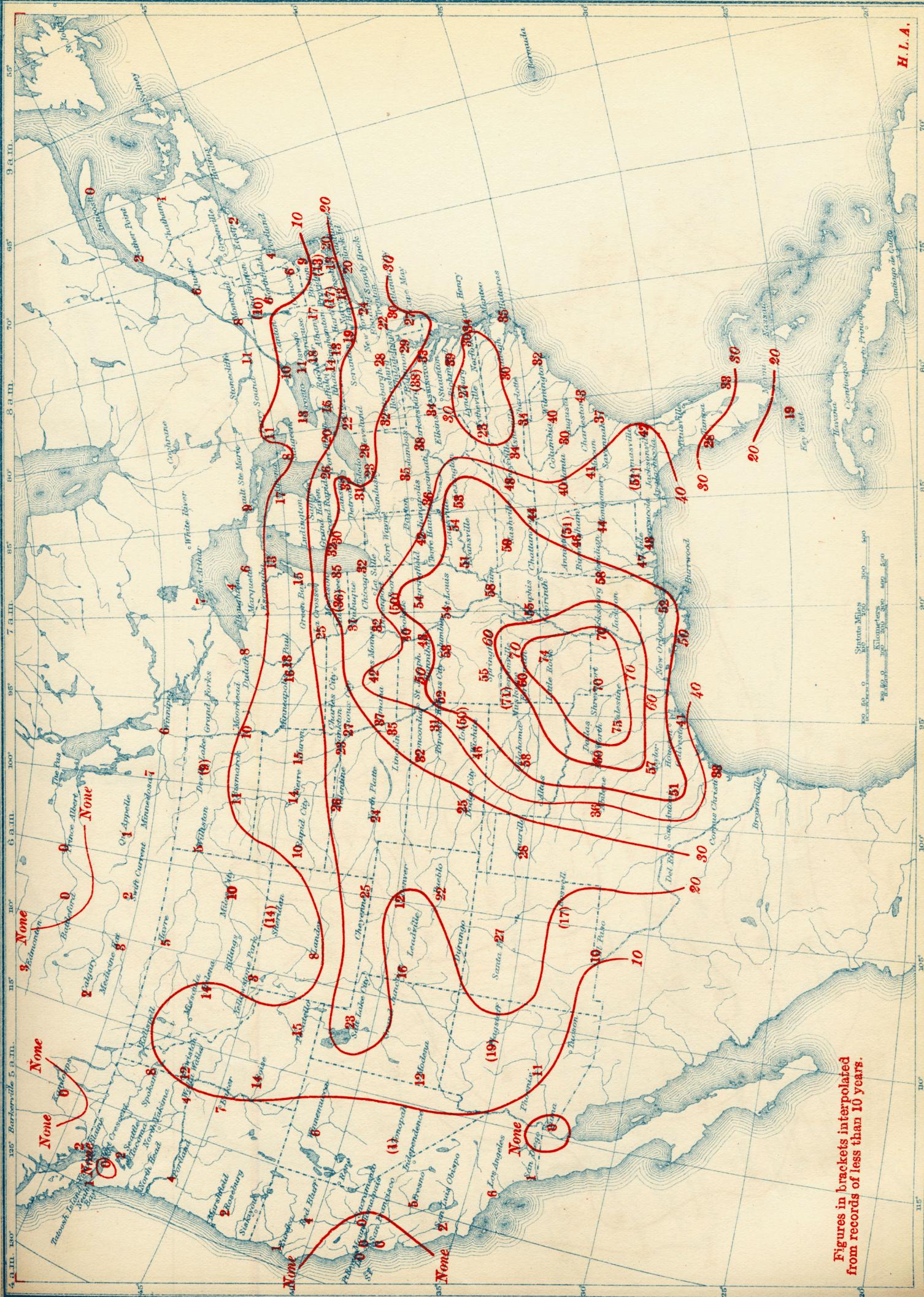
Figures in brackets interpolated
from records of less than 10 years.

W. H. A. Fig. 3. Total Number of Thunderstorms Reported for March, 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated from records of less than 10 years.

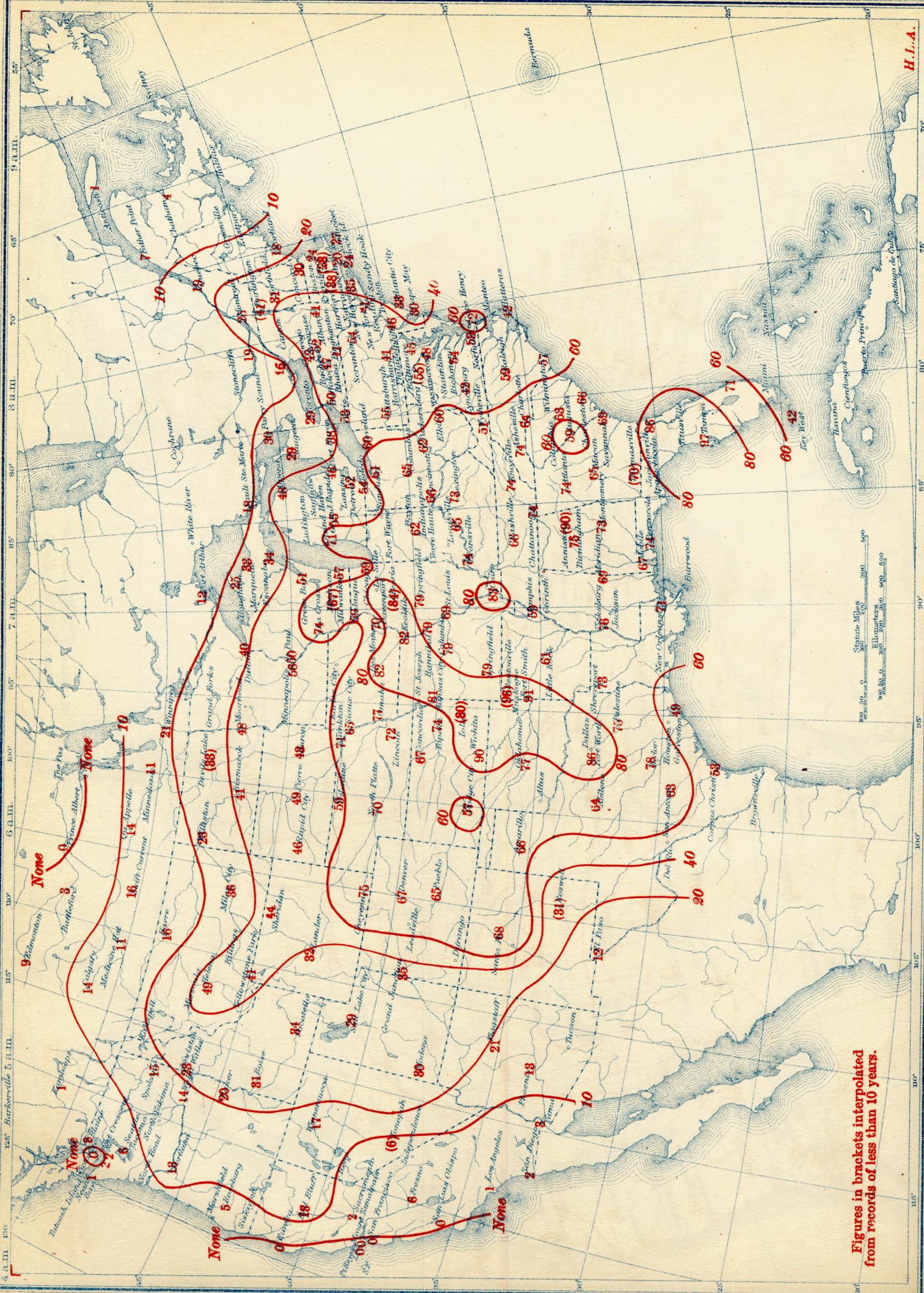
W. H. A. Fig. 4. Total Number of Thunderstorms Reported for April, 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated
from records of less than 10 years.

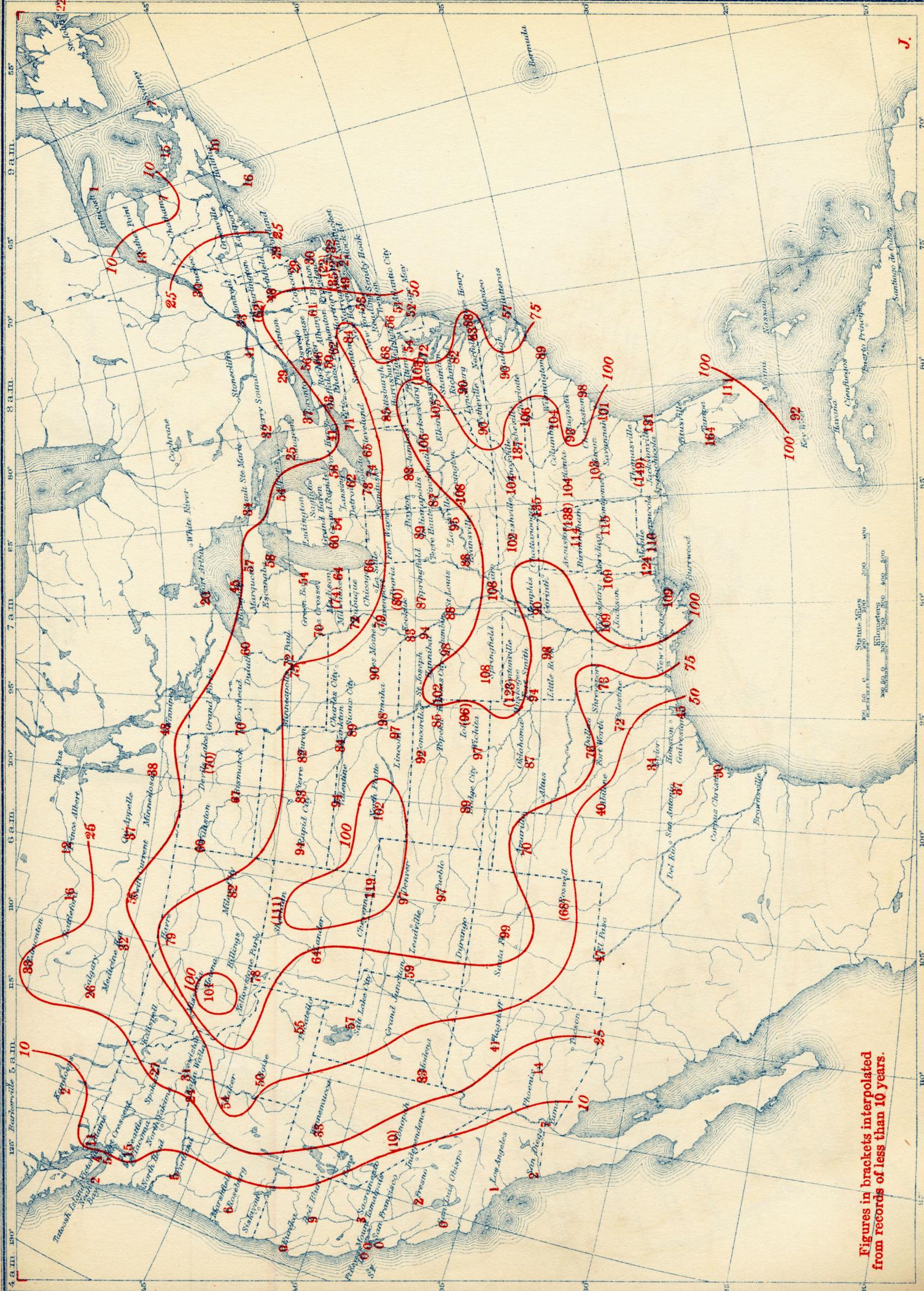
H. L. A.

Fig. B. Total Number of Thunderstorms Reported for May, 10-Year Period, 1904-1913, Inclusive.



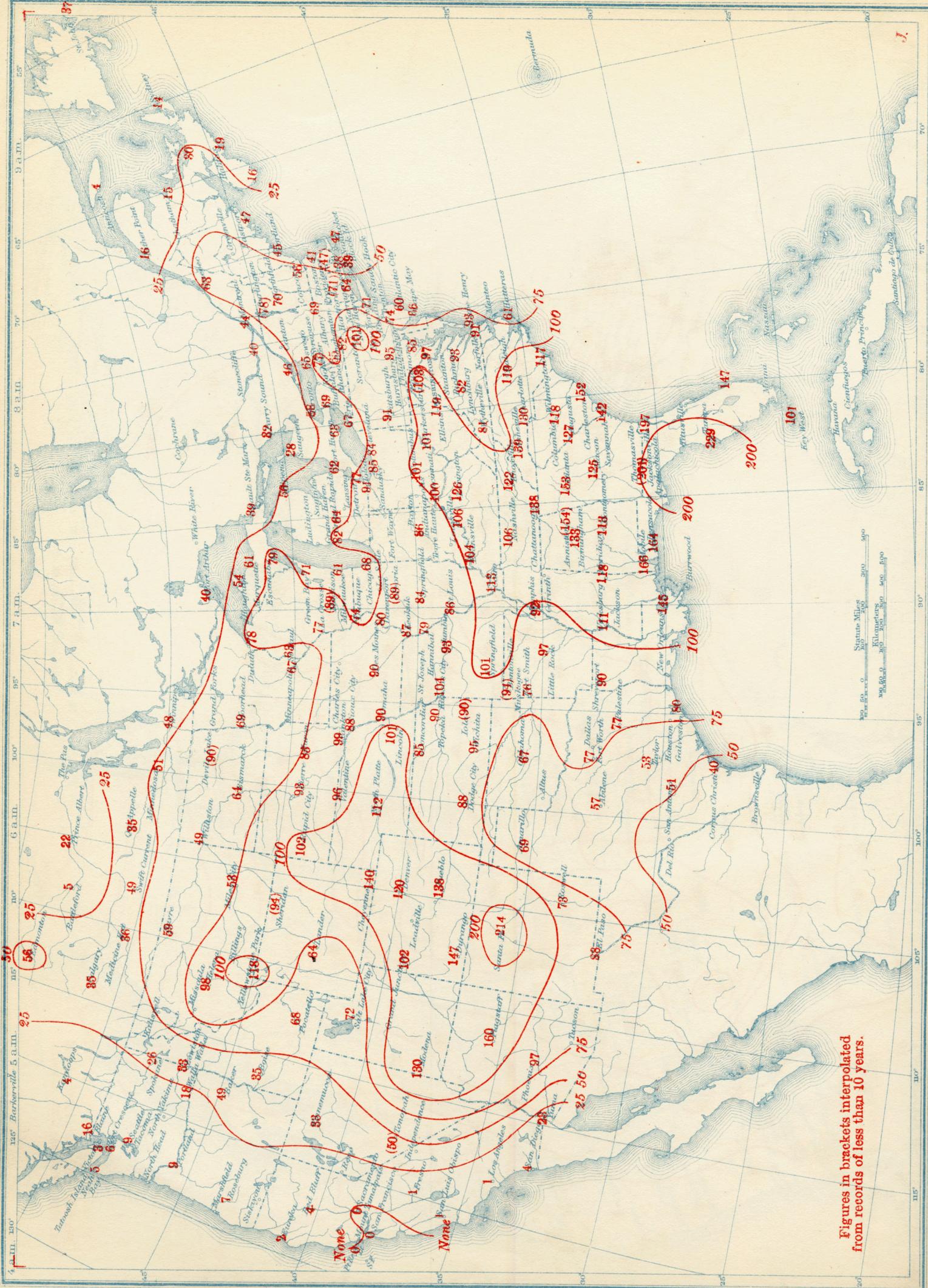
Figures in brackets interpolated from records of less than 10 years.

W. H. A. Fig. 6. Total Number of Thunderstorms Reported for June, 10-Year Period, 1904-1913, Inclusive.



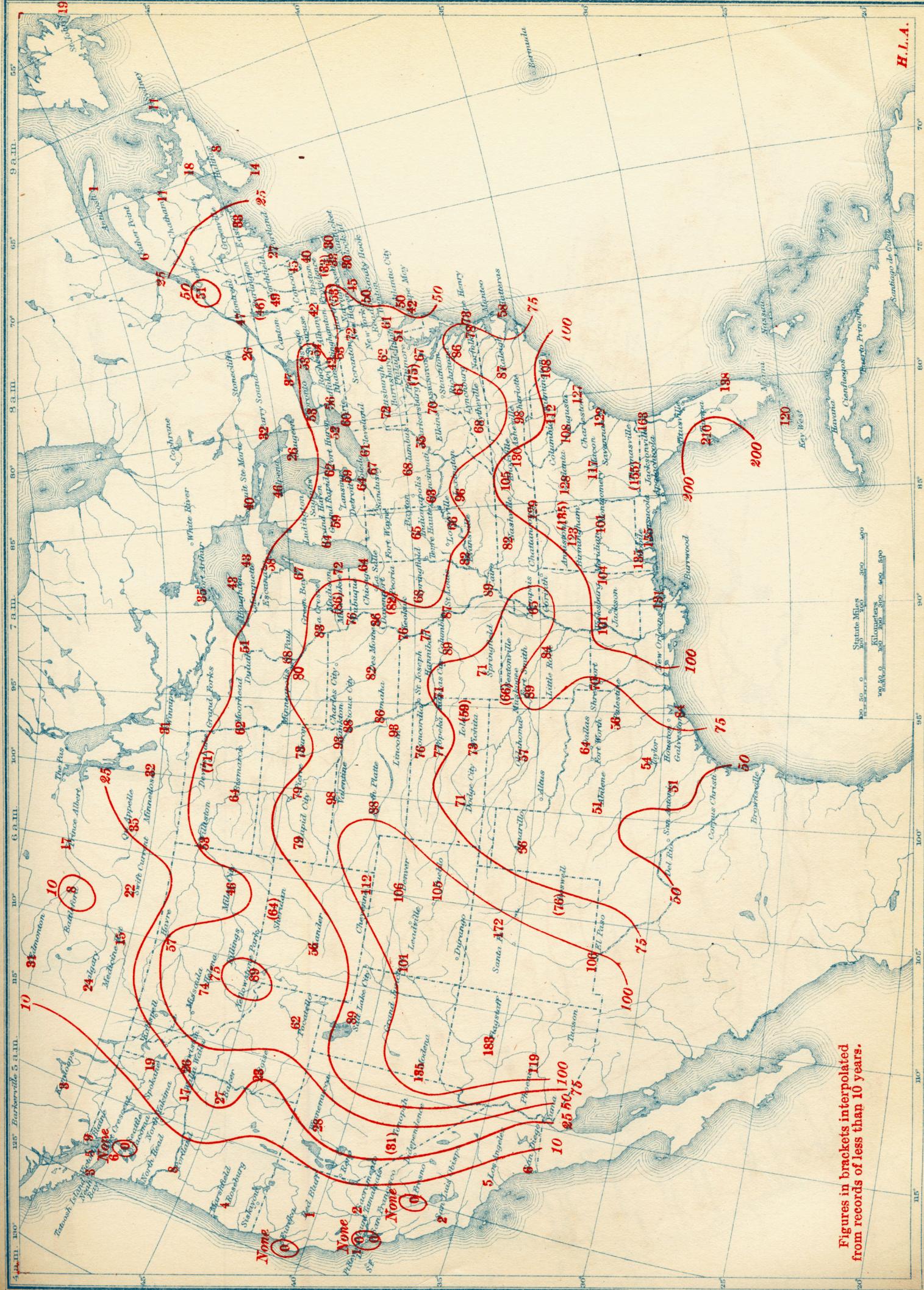
Figures in brackets interpolated
from records of less than 10 years.

W. H. A. Fig. 7. Total Number of Thunderstorms Reported for July, 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated
from records of less than 10 years.

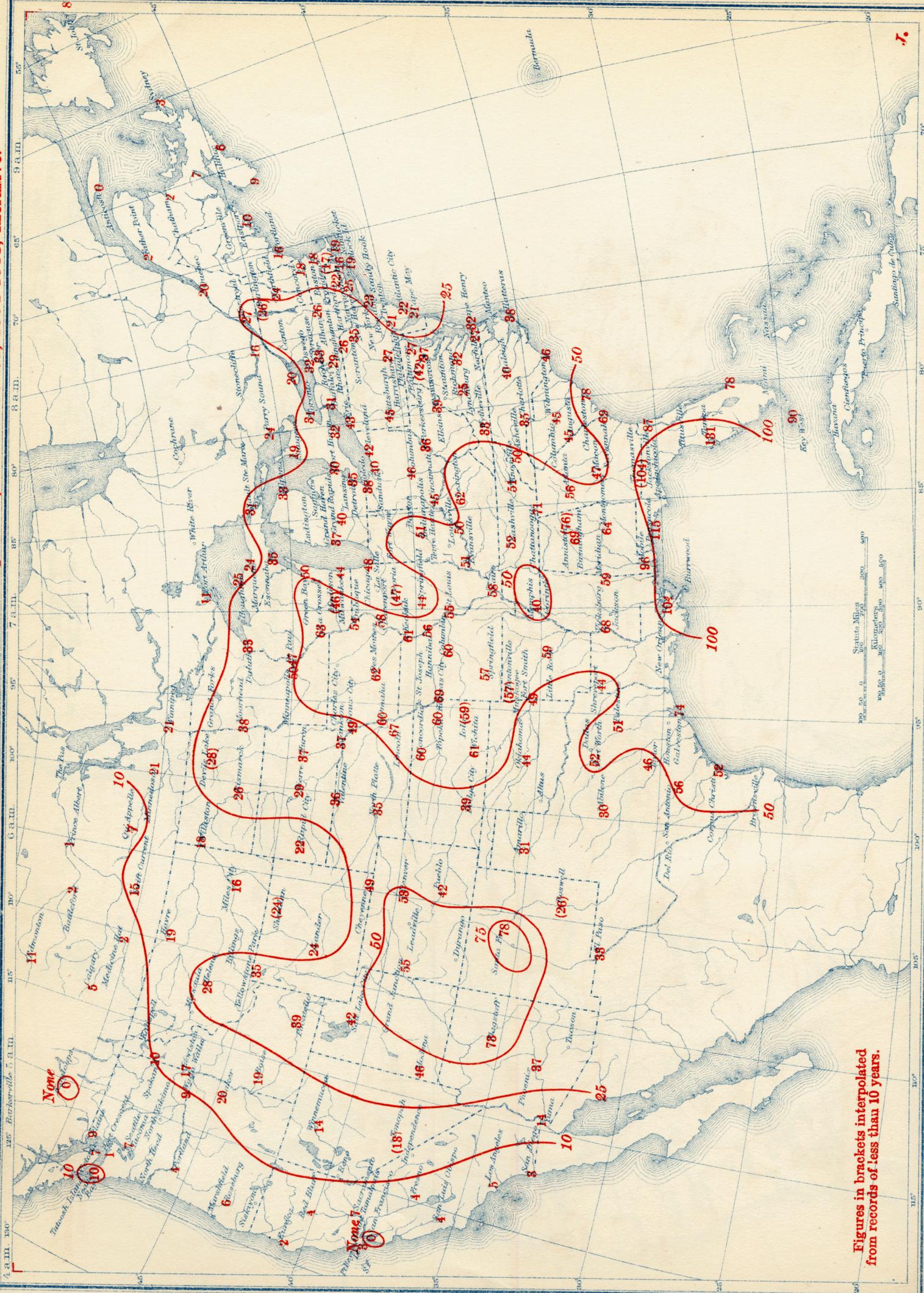
W. H. A. Fig. 8. Total Number of Thunderstorms Reported for August, 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated
from records of less than 10 years.

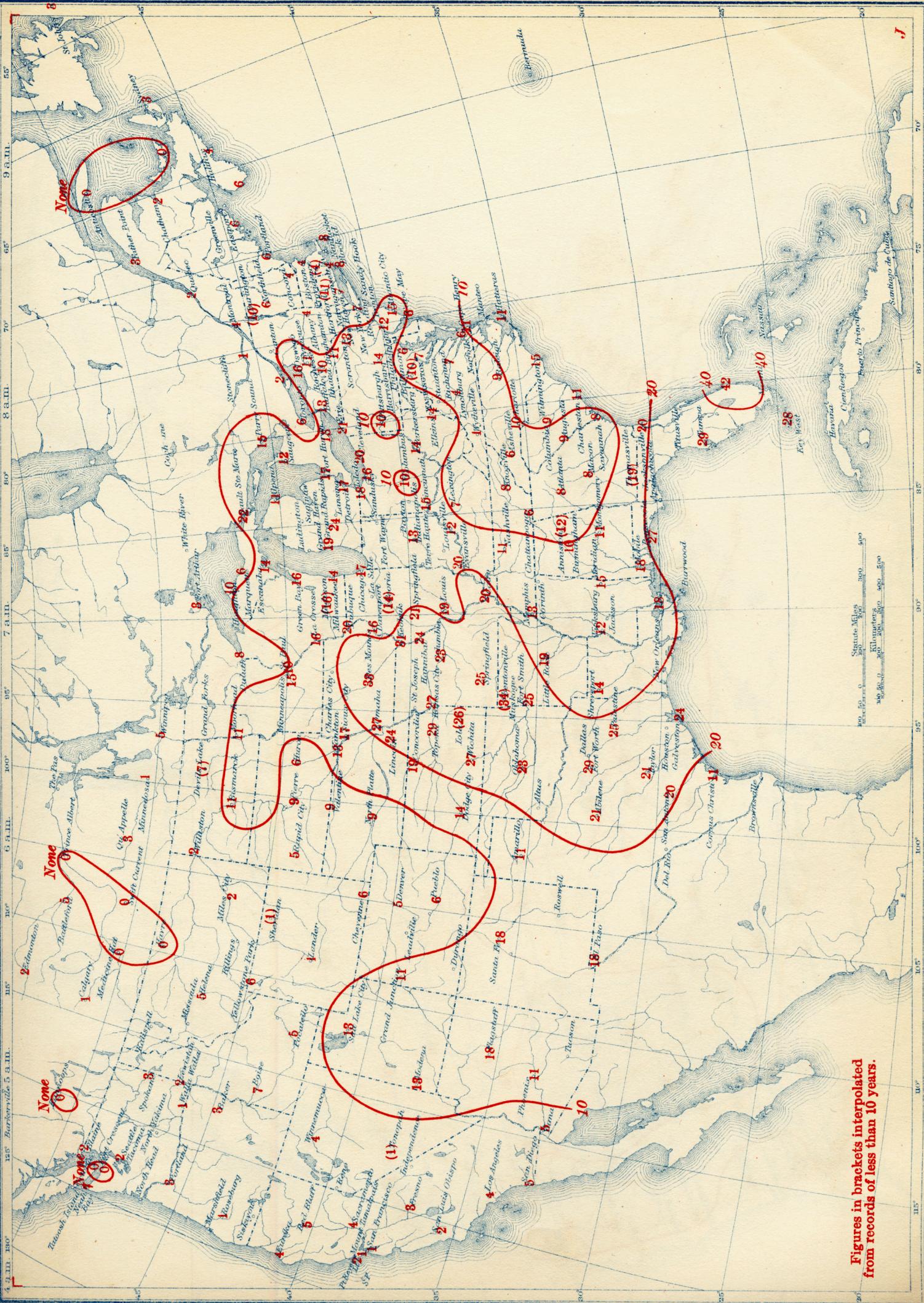
H.L.A.

N. H. A. Fig. 9. Total Number of Thunderstorms Reported for September, 10-Year Period, 1904-1913, Inclusive.

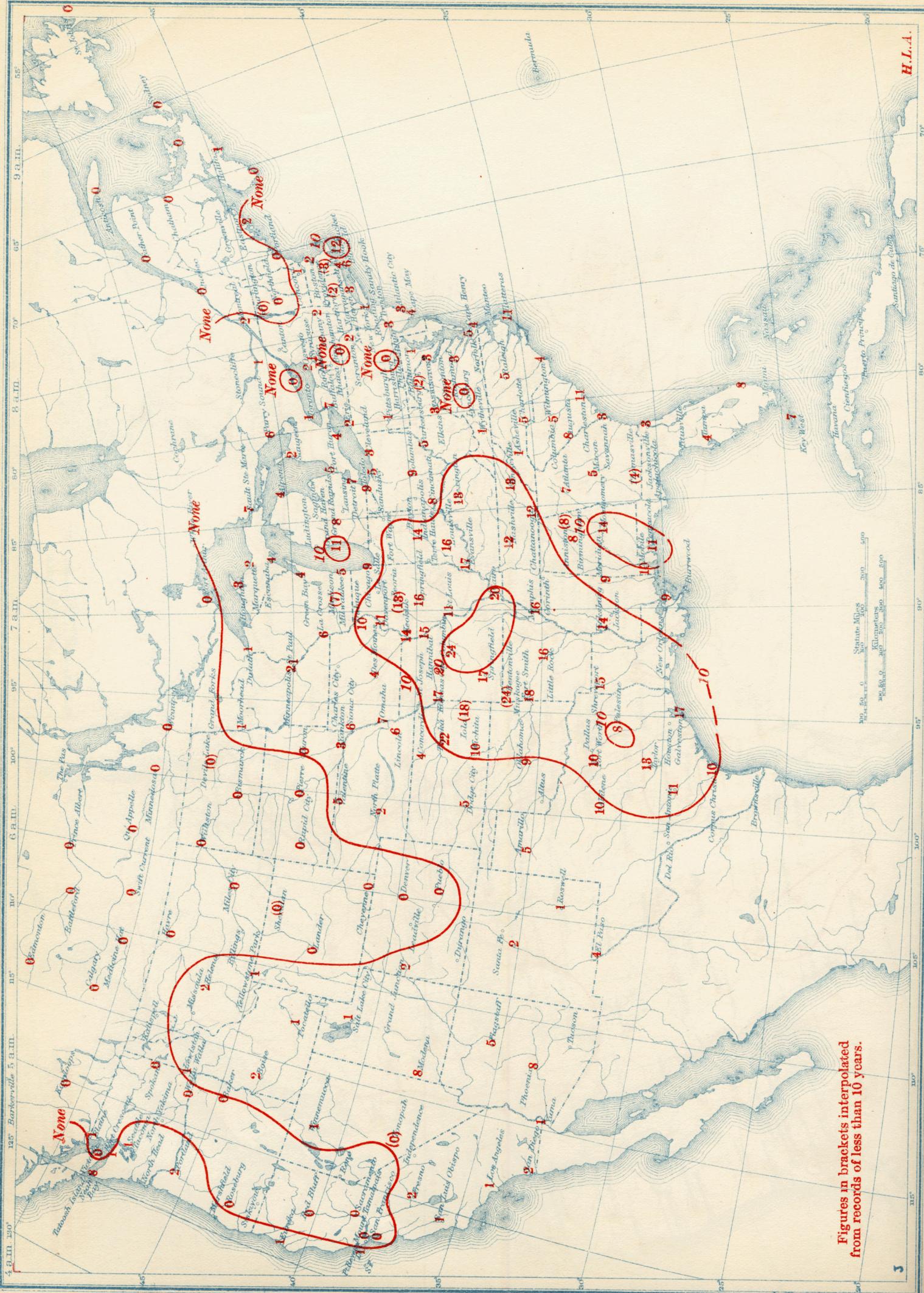


Figures in brackets interpolated from records of less than 10 years.

W. H. A. Fig. 10. Total Number of Thunderstorms Reported for October, 10-Year Period, 1904–1913, Inclusive.



W. H. A. Fig. 11. Total Number of Thunderstorms Reported for November, 10-Year Period, 1904-1913, Inclusive.



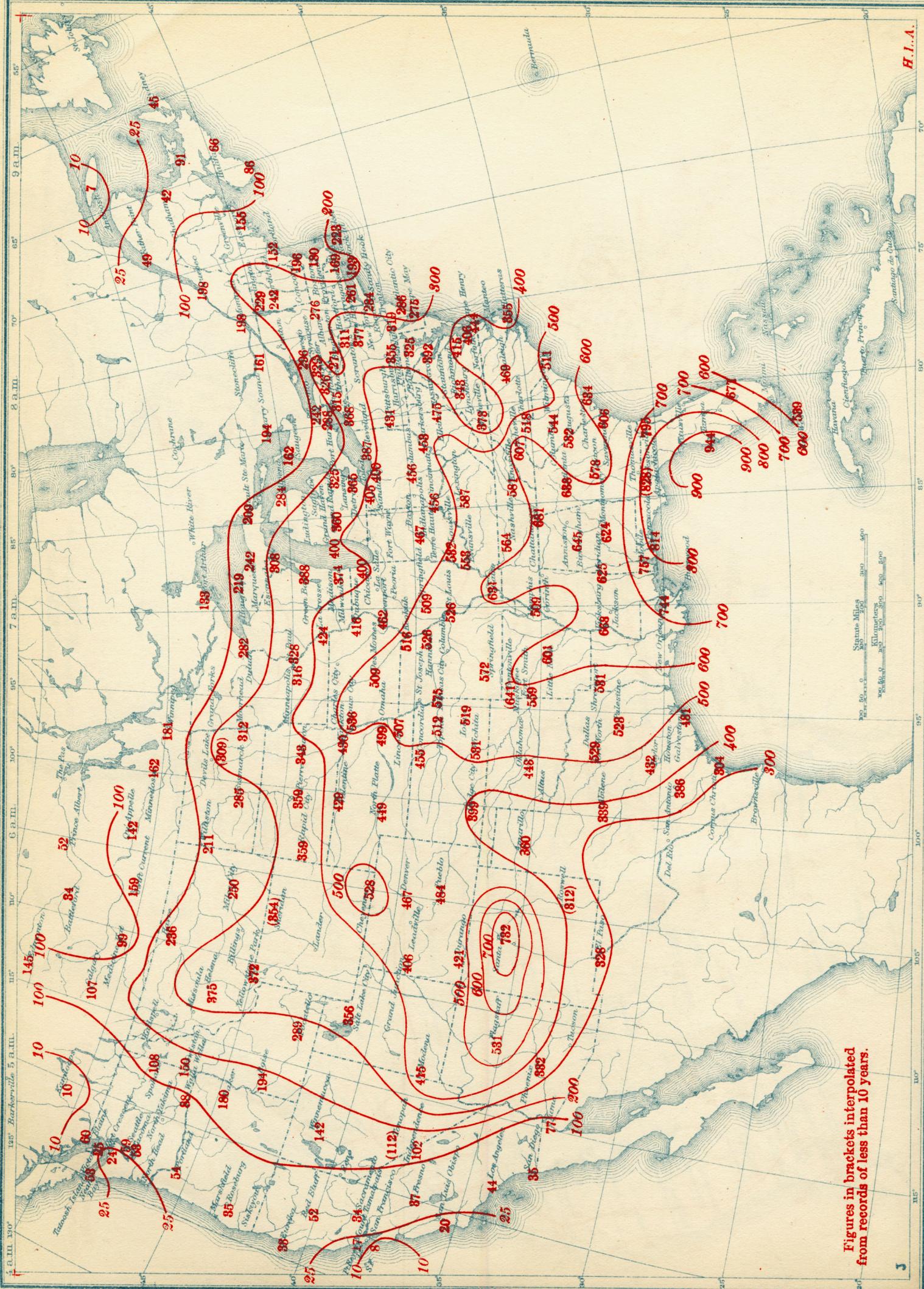
Figures in brackets interpolated
from records of less than 10 years.

W. H. A. Fig. 12. Total Number of Thunderstorms Reported for December, 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated from records of less than 10 years.

Fig. 13. Total Number of Thunderstorms During the 10-Year Period, 1904-1913, Inclusive.



Figures in brackets interpolated from records of less than 10 years.